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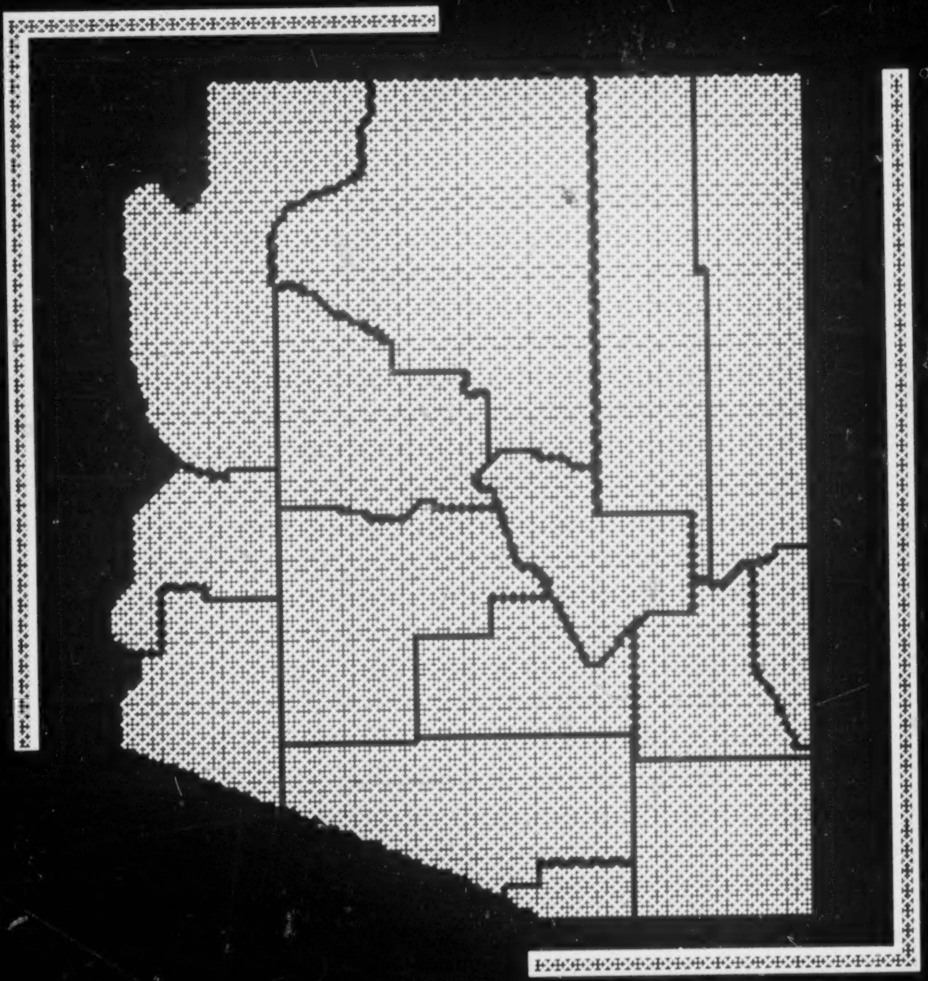
ARIZONA
HEALTH STATUS AND VITAL STATISTICS
1990



Office of
Planning and
Health Status
Monitoring

(Designated
State Center
for Health
Statistics)

ARIZONA DEPARTMENT OF HEALTH SERVICES

1912

Fife Symington, *Governor*
State of Arizona

Alethea O. Caldwell, *Director*
Arizona Department of Health Services

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ARIZONA DEPARTMENT OF HEALTH SERVICES

Office of the Director

FIFE SYMINGTON, GOVERNOR
ALETHEA O. CALDWELL, DIRECTOR

To My Fellow Arizonans and Other Interested Parties:

A fundamental function of the Arizona Department of Health Services is to identify health issues specific to Arizona. One way we do this is by compiling, enumerating, and analyzing data on the state's births, deaths, and reported cases of several infectious diseases. Analysis of these vital events is essential for surveillance of the public's health, planning of health care services and prevention programs, and health policy decision making. This information is important not only to persons and organizations in the health field but also to other local and state governmental agencies, the universities, the business community, and other entities. Thus, I am pleased to present Arizona Health Status and Vital Statistics 1990, our eighth annual report in this series.

Each year the report has grown in scope and detail to better serve the public by easy access to critical information and data. This latest report has 191 tables and 100 graphs. More graphics were used to meet the needs of those who prefer a picture of a trend to a series of numbers. The report also compares Arizona's standing in 1990 with respect to the national health objectives for the year 1990 and the year 2000, an important comparison in the year which begins the decade that ends in the 21st century. The report concludes with comparisons among counties on selected health indicators.

It is hoped that you find the report useful to your needs. We would appreciate receiving any comments you may have about data to include in the report, or ways in which we may improve the report and make it more "user-friendly" to all of us interested in improving the health status of Arizonans.

Sincerely,

Alethea O. Caldwell
Director

The Department of Health Services is an Equal Opportunity Affirmative Action Employer.

State Health Building 1740 West Adams Street Phoenix, Arizona 85007

ARIZONA
HEALTH STATUS AND VITAL STATISTICS

1990

by

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Office of Planning and Health Status Monitoring
(Designated State Center for Health Statistics)

ARIZONA DEPARTMENT OF HEALTH SERVICES

March 1992

Special gratitude is expressed to Roberta Durfee and Dorothy Reissig for their patience and expertise in typing and formatting the manuscript. Our appreciation to Dr. Douglas Campos - Outcalt for reviewing this manuscript.

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INTRODUCTION

This publication by the Arizona Department of Health Services, Arizona Health Status and Vital Statistics 1990, is the eighth annual update of information on the health status of Arizona residents and vital statistics. It provides readers with population-level data on trends in the health of Arizona residents and this year is organized into four major parts rather than the two major parts of prior reports.

Part I is concerned with health status and Part II is devoted to vital statistics, each with several sections. Part III focuses on Arizona's standing in 1990 with respect to selected major national health objectives for the year 1990 and the year 2000. A rank order of the counties in Arizona on selected health indicators are presented in a series of graphs in Part IV. The tables and graphs or figures presenting the data in each part are listed before the health status portion or Part I of the report begins. This listing should aid readers with specific data needs.

The health status portion of the report has four sections. The first section deals with natality, i.e., fertility and birth rates, the general health of newborns as indexed by birthweight and prematurity, and some demographic and prenatal care characteristics of the women giving birth. Much of these data are given for each year from 1980 to 1990. The broader array of natality data introduced on the birth certificate in 1989 is given for 1990, with some comparisons with the 1989 data. These new data included such factors as use of alcohol and/or tobacco by mother during pregnancy and payee, e.g. AHCCCS and private health insurance, for the birth. The natality section concludes with an examination of the major risk factors for preterm, low birthweight babies relative to term, low birthweight babies.

The second or total mortality section compares the annual age-adjusted profile of leading causes of death between Arizona and United States residents from 1980 to 1990. Gender and county differences in total and cause-specific age-adjusted mortality rates also are examined for Arizona as are differences by ethnicity, an examination made possible by the 1990 Census which provided ethnic population counts. The 1990 rates for these subgroups are compared at a minimum with their respective 1980 rates. Ethnic groups also are contrasted on indicators of premature mortality.

The third section addresses age-specific mortality. The five leading causes of death are discussed for infants, children (1-14 years), adolescents (15-19 years), young adults (20-44 years), middle-aged adults (45-64 years) and the elderly (65 or more years). For each age group, cause-specific mortality is compared between urban (i.e., Maricopa and Pima counties in 1980; Yuma county was added to the urban group in 1990) and rural (all other counties) regions and between genders. Urban and rural regions are compared in gender-specific total mortality. Contrasts are made between the younger and older elderly in total and cause-specific mortality by gender and region. The years used in almost all comparisons are 1980, 1985 and 1990.

Morbidity, levels of disease and disability in the population, is the topic of the fourth and final section of the health status portion of the report. The discussion is limited to data on diseases and/or disabilities reported for the entire population of the state because of legal requirements. The trends in annual incidence of these selected notifiable diseases from 1980 to 1990 are discussed and differences in incidence for 1990 by county are examined. Mortality from infectious diseases during the period from 1980 to 1990 also is discussed.

Parts II, III and IV of the report contain information with no accompanying narrative. In Part II, Vital Statistics, tables in six sections give data on 1) population composition; 2) births; 3) maternal, perinatal and infant mortality; 4) deaths and crude mortality rates; 5) marriages and divorces; and 6) pregnancies and abortions. Any vital statistics used for the health status narrative are found in Part I. The material included in Parts III and IV was described earlier.

DATA SOURCES, LIMITATIONS AND DEFINITIONS

SOURCES OF DATA

Information on births, deaths and fetal deaths is compiled from the original documents filed in the Arizona Department of Health Services', Office of Vital Records, and from transcripts of original certificates filed in other states but affecting Arizona residents. (Copies of certificates for births, deaths and fetal deaths occurring to Arizona residents outside the United States are not sent to Arizona.) Information on abortions performed on Arizona women is compiled from reports sent to the Arizona Department of Health Services by facilities within but not outside the state. Pregnancies are the sum of live births, spontaneous terminations of pregnancy (fetal deaths or stillbirths) and induced terminations of pregnancy (abortions). Arizona has no central registry for marriage or divorce records. Statistics are limited to counts of marriages and divorces reported monthly by the Clerk of the Superior Court of each county in which the marriage or divorce occurred. These reports contain no personal or demographic data on the people marrying or divorcing.

POPULATION

Population data, used to calculate rates, are from the Population Statistics Unit in the Arizona Department of Economic Security and the U.S. Census Bureau.

The population figures for 1980 and 1990 for Black, Native American, Asian or Pacific Islander or Hispanic residents of Arizona are those released by the U.S. Census Bureau. Unless otherwise specified, the category White refers in this report to persons who did not identify themselves with any of these racial or Hispanic origin groups.

Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau to be as classified as urban. The remaining counties comprise Arizona's rural areas.

RELIABILITY OF RATES

Rate - is a measure of the frequency of some event in relation to a unit of population during a specified time period such as a year; events in the numerator of the year occur to individuals in the denominator. Rates express the likelihood (or risk) of the event in the specified population during a particular time and are generally expressed as units of population in the denominator (per 1,000, per 100,000, and so forth).

Many rates shown in this report are based on a small population, a small number of events, or both. Rates based on small numbers are unreliable and thus should be used with caution. Rates for many counties also vary considerably from year to year due to small populations and few events. In addition, no adjustments for differences in the distribution of age or other demographic variables have been made to the rates given in the Vital Statistics portion (Part II) of this report. Therefore, caution must be exercised when forming conclusions on the basis of these crude or non-adjusted rates.

TERMS RELATED TO REPRODUCTIVE HEALTH[1]

Total Births - Sum of all live births to women of all ages during a calendar year.

Live Birth or Birth - The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy which, after such expulsion or extraction, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Gestational Age - The number of completed weeks that have elapsed between the first day of the last normal menstrual period (not the presumed time of conception) and the date of delivery, irrespective of whether the gestation results in a live birth or a fetal death.

Birth Weight - The weight of a neonate determined immediately after delivery or as soon thereafter as possible. It should be expressed to the nearest gram (g).

Low Birth-Weight[2] - Prior to 1990: Any neonate whose weight at birth is 2,500 g or less. Beginning in 1990: Any neonate weighing less than 2,500 grams at birth.

Preterm - Any neonate whose birth occurs through the end of the last day of the 37th week (259th day), following onset of the last menstrual period.

Term - Any neonate whose birth occurs from the beginning of the first day (260th day) of the 38th week, through the end of the last day of the 42nd week (294th day), following onset of the last menstrual period.

Post Term - Any neonate whose birth occurs from the beginning of the first day (295th day) of the 43rd week following onset of the last menstrual period.

Birth Rate (or Crude Birth Rate) - Number of live births to women of all ages during a calendar year per 1,000 population.

Age-Specific Birth Rate - Number of live births to women in specific age group during a calendar year per 1,000 female population in that same age group.

Low-Weight Birth Rate - Number of live births weighing less than 2,500 grams (less than 5 lbs., 8 ozs.) per 1,000 births.

General Fertility Rate - Total number of live births to women of all ages during a calendar year per 1,000 population of women 15-44 years old (the childbearing years).

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[1] These definitions conform to those approved by the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, the American Medical Association, the Association for Vital Records and Health Statistics, the Centers for Disease Control, the National Center for Health Statistics and the federal Office of Maternal and Child Health. See: "Standard Terminology for Reporting Reproductive Health in the United States," Public Health Reports, September-October 1988, Vol. 103, No. 5.

[2] Since 1979, the nationwide data are published for infants weighing less than 2,500 grams.

Total Fertility Rate - The sum of age-specific birth rates of women at each age group 10-14 through 45-49. Since 5-year age groups are used, the sum is multiplied by 5.

Pregnancies - The sum of all live births, fetal deaths and abortions during a calendar year.

Pregnancy Rate - Number of live births, fetal deaths and abortions to women of all ages, during a calendar year per 1,000 population of women 15-44 years old.

Age-Specific Pregnancy Rate - Number of live births, fetal deaths and abortions to women in specific age group during a calendar year per 1,000 female population in that same age group.

Natural Increase - The excess of births over deaths.

Natural Increase Rate - The excess of births over deaths per 1,000 population.

Abortion (Induced Termination of Pregnancy) - The purposeful interruption of an intrauterine pregnancy with the intention other than to produce a liveborn infant, and which does not result in a live birth. This definition excludes management of prolonged retention of products of conception following fetal death.

Abortion Rate - Number of reported abortions to females of all ages during a calendar year per 1,000 females of childbearing age (15-44 years).

Abortion Ratio - Number of abortions reported during a period per 1,000 live births occurring during the same period.

Fetal Death - Death prior to the complete expulsion or extraction from its mother of a product of conception that has reached at least 20 weeks of gestation. The death is indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. If the gestation period is unknown or uncertain, a fetal death certificate is filed if the fetus weighs 500 grams or more.

Neonatal Death - Death of a liveborn neonate before the neonate becomes 28 days old (up to and including 27 days, 23 hours, 59 minutes from the moment of birth).

Postneonatal Mortality - Any death of a liveborn neonate at least 28 days of age but under one year of age.

Infant Mortality - Any death at any time from birth up to, but not including, one year of age (364 days, 23 hours, 59 minutes from the moment of birth).

Maternal Death - The death of a woman from any cause related to or aggravated by pregnancy or its management (regardless of duration or site of pregnancy), but not from accidental or incidental causes.

Maternal Mortality Rate - Number of deaths attributed to maternal conditions per 100,000 live births.

Fetal Death Rate (I) - Number of fetal deaths at 20 or more weeks of gestation per 1,000 live births and fetal deaths at 20 or more weeks of gestation.

OTHER TERMS

Occurrence data -	Data compiled by the place where the event occurred, regardless of the person's place of residence.
Residence data -	Data compiled by the person's usual place of residence without regard to the geographical place where the event occurred.
Marriage Rate -	Number of recorded marriages per 1,000 population.

Dissolution of Marriage Rate - Number of recorded divorces and annulments per 1,000 population.

Ethnicity - The Arizona birth and death certificates record Hispanic origin for all races which permits differentiation of persons classified as "White", "Black", "Native American" or "Asian" into those who simultaneously are or are not of Hispanic origin.

Starting in 1978, Yaqui Indians were no longer classified as White but Native American. The Native American figures include those living both on and off the reservation. Information on a specific tribe is not reported.

Ethnicity of mother, father or descendant is as stated on the certificate. Ethnicity of infant is determined from ethnicity of the parent(s) using classification procedures established by the National Center for Health Statistics.

CHILD'S RACE DETERMINATION TABLE

MOTHER'S RACE

FATHER'S RACE CODE	1	2	3	4	5	6	7	8	0
1	1	2	3	4	5	6	7	8	0
2	2	2	2	2	2	6	2	2	2
3	3	3	3	3	3	6	3	3	3
4	4	4	4	4	4	6	4	4	4
5	5	5	5	5	5	6	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	6	7	7	7
8	8	8	8	8	8	6	8	8	8
9	1	2	3	4	5	6	7	8	0
0	0	0	0	0	0	6	0	0	0

1 = WHITE
2 = BLACK
3 = INDIAN
4 = CHINESE
5 = JAPANESE
6 = HAWAIIAN
7 = OTHER RACES (OTHER NON-WHITE)
8 = FILIPINO

CLASSIFICATION OF CAUSE OF DEATH

The cause of death used in this report is the underlying cause classified according to the International Statistical Classification of Diseases, Injuries, and Causes of Death. Listed below are categories, International Classification of Disease (ICD) codes, and examples of specific diseases for selected causes of mortality discussed in this report. The numbers are the codes from the ICD classification (Ninth Revision, 1975) which covers that cause of death.

Cause of Death Category	ICD Code(s)	Examples
Infectious and parasitic diseases	001-041, 045-139 *042- *044	Tuberculosis, septicemia, viral hepatitis, coccidioidomycosis, human immunodeficiency virus (HIV) infection
Malignant neoplasms	140-208	Lung cancer, leukemia, breast cancer, colon cancer
Diabetes mellitus	250	Diabetes with coma, diabetes with ophthalmic manifestations, diabetes with renal manifestation
Alcoholism	291, 303 571.0-571.3	Alcoholic psychoses, alcohol dependence syndrome, cirrhosis of liver
Diseases of heart	390-398, 402 404-429	Myocardial infarction, hypertensive heart disease, cardiomyopathy, cardiac dysrhythmias
Cerebrovascular diseases (stroke)	430-438	Intracerebral hemorrhage, occlusion of cerebral arteries
Atherosclerosis	440	Atherosclerosis of aorta, atherosclerosis of renal artery
Other diseases of the arteries	441-448	Aortic aneurysm, arterial embolism and thrombosis, polyarteritis nodosa, diseases of capillaries
Pneumonia and influenza	480-487	Viral pneumonia, bronchopneumonia pneumococcal pneumonia, influenza
Chronic obstructive pulmonary disease (COPD)	490-496	Bronchitis, emphysema, asthma, bronchiectasis, allergic alveolitis
Congenital anomalies	740-759	Heart defects, anencephalus, anomalies of respiratory system, anomalies of central nervous system
Certain conditions originating in perinatal period	760-779	Maternal hypertensive disorders, slow fetal growth and fetal malnutrition, birth trauma, disorders relating to short-gestation and low birthweight
Symptoms and ill-defined conditions	780-799 798.0	General symptoms, nonspecific abnormal findings, ill-defined and unknown causes of mortality, sudden infant death syndrome
Unintentional injuries from accidents	800-949	Poisoning, falls, motor vehicle accidents, fatalities due to natural and environmental factors
Motor vehicle	810-825	
Drowning	830,832,910,984	
Suicide	950-959	
Homicide	960-969	

* Codes introduced by the National Center for Health Statistics in January 1987.

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Part I:

HEALTH STATUS

NATALITY

NATALITY

The first part of this section either gives a year-by-year review of those characteristics of births reported annually from 1980 to 1990 or compares birth statistics for 1980 and 1990. The second part of this section gives the 1990 values on those data elements which were newly reported or reported in new format on the 1989 new standard birth certificate. A comparison of the 1989 and 1990 values on these elements also was made, with those 1989 to 1990 changes reported in tabular form which were in different directions by area, ethnicity or payee for the delivery. The section concludes with a summary of the risk factors usually considered of major importance for low birthweight and prematurity, the primary adverse birth outcomes.

Annual Birth Rates from 1980 through 1990

In 1990, 68,814 babies were born in Arizona compared to 50,049 in 1980, an increase of 37 percent. The simultaneous population growth of 35 percent from 1980 to 1990 resulted in a 1990 birth rate only 2.2 percent higher than the 1980 rate. However, the 1990s began with a birth rate which exceeded any annual rate in the 1980s (Table 1-1).

Annual birth rates in Arizona have consistently exceeded the U.S. birth rate from 1980 to 1990 (Table 1-1). The percent exceedance was 12.6 in 1990 compared to 16.5 in 1980. In 1990, one baby was born for about every 6,000 people in the U.S., while one birth per approximately 5,300 people occurred in Arizona.

Maricopa, Mohave, Pima, Santa Cruz, and Yuma counties had a higher birth rate in 1990 than in 1980 (Table 1-1). Moreover, the 1990 birth rates for Maricopa, Pima and Santa Cruz counties were greater than all respective annual birth rates during the 1980s. Birth rates fell from 1980 to 1990 in Coconino, Yavapai, Graham and Greenlee counties, with declines of 16, 18, 29 and 45 percent respectively.

The 1990 birth rates of Apache, Navajo, Santa Cruz and Yuma counties were at least 22 percent greater than the 1990 statewide birth rate. Yavapai was the county with the lowest 1990 birth rate, 40 percent below the state rate. LaPaz county closely followed with a 1990 birth rate 38 percent lower than the state rate, while Greenlee county had the third lowest 1990 birth rate among the counties.

Fertility and Age-Specific Birth Rates for 1980 and 1990

General and total fertility rates were higher in 1990 than in 1980 (Table 1-2). The 1990 total fertility rate of 2,418 exceeded the generation replacement rate of 2,110 by 15 percent, a greater exceedance of the replacement rate than in any year of the 1980s.

In fact, the 1980 Arizona total fertility rate differed from the generation replacement rate by less than 2 percent.

Twenty-five to 29 year old women were the only age group with a lower birth rate in 1990 than in 1980, declining by 14 percent (Table 1-2). In other words, only 25 to 29 year old women did not contribute to the increased total fertility rate. This decline combined with the increases of at least 24 percent in birth rates for each of the three older five-year age groups (i.e., 30-34, 35-39 and 40-44) strongly suggests a trend toward delayed childbearing from 1980 to 1990. The shift to childbearing at older ages is also indicated by the lower ratio of the 25-29 year old birth rate to the 30-44 year old birth rate in 1990 than in 1980, with ratios of 2.4:1 and 3.4:1 respectively. In other words, younger women had one less birth for every birth to older women in 1990 compared to 1980.

The 1990 general fertility rate, i.e., the rate for 15 to 44 year old women (Figure 1), increased from or was within 2 percent of the 1980 rate for every ethnic group. Almost 13 out of 100 Native American women , 12 out of 100 Hispanic women, 10 out of 100 Black women and 7 out of 100 white non-Hispanic women of childbearing age gave birth in 1990. The 1990 total fertility rate for each ethnic minority group also exceeded the generation replacement rate, a finding not true for white non-Hispanic women. Native American women had 1.4 more children than needed to replace their generation in the future.

The decline in birth rates for 25 to 29 year olds only applied to ethnic minority women. The shift in childbearing to older age appears most pronounced for white non-Hispanic women, as indicated by the at least 50 percent increase in the 30-34 and 35-39 year old birth rates and the less than 20 percent increase in birth rates of the younger age groups. In contrast, among Hispanic women, the three youngest age groups from less than 15 to 24 years of age had the largest age-specific increases in birth rates. Black women had birth rates that increased by at least 20 percent in 4 age groups: 15-19, 20-24, 30-34 and 35-39 years of age. The largest increase in age-specific birth rates among Native American women was for those 20-24 years old.

Characteristics of Newborns and Women Giving Birth from 1980 through 1990

The Statewide Profile

Babies are considered at greater risk to either not survive until their first birthday or, if they do survive, to have poorer medical and developmental outcomes if they are born with one or more of the following characteristics: a) weighing 1,500 or less grams (very low birthweight = VLBW); b) weighing 2,500 or less grams (low birthweight =

LBW); and c) prematurity, i.e., gestational age of less than 38 weeks. The rate of each risk characteristic rose from 1980 to 1990, with the 1990 VLBW rate 44 percent higher, the LBW rate 5 percent higher, and the prematurity rate 16 percent higher (Table 1-3). Annual rates of prematurity were clearly on an ascending trend from 1980 to 1990. The trend for prematurity to overlap with an increasingly greater proportion of LBW births was even clearer, going from 54 percent in 1980 to 74 percent in 1990 (Table 1-4). The trends in LBW (Figure 2) or VLBW rates were much less clear on an annual basis, with major increases tending to occur in blocks of 3 to 4 years. The description now turns to those maternal or health care characteristics often thought of as risk factors for these three poor outcomes among newborns.

Maternal age. The proportion of births to women at least 30 years old increased annually from 18.7 percent in 1980 to 27.4 percent in 1990 (Table 1-3), an increase in absolute numbers of nearly 9,500 births. Adolescents, i.e., less than 20 years old, accounted for a progressively lower proportion of births from 1980 to 1985. Thereafter, their proportional contribution increased slightly each year, reaching a new yearly high in 1990 of 14.2 percent. However, while the percent of births to teenagers was 14 percent lower in 1990 than in 1980, the absolute number of births to teenagers was almost 1,500 greater in 1990 than in 1980.

Teenagers and women at least 30 years both made a slightly higher proportional contribution to LBW births (Table 1-4) than to total births. Adolescent motherhood was a somewhat stronger risk factor than older motherhood since its percent of LBW births exceeded its percent of total births by a greater amount.

Marital status. Single mothers have accounted for an increasing annual proportion of births throughout the 1970s and 1980s, with their 32.6 percent of births in 1990 marking a historical high (Table 1-3, Figure 2). Compared to the 18.7 percent of births to unmarried mothers in 1980, the 1990 rate was 74 percent greater. Less than 10,000 babies were born to unwed mothers in 1980 compared to more than 22,000 in 1990.

The percent of LBW babies associated with single motherhood generally increased yearly, rising from 28.1 percent in 1980 to 41.3 percent in 1990 (Table 1-4). Unmarried mothers contributed more to LBW births than to all births. The difference between the two proportions was greater for single mothers than for teenaged mothers or mothers 30 years of age or older. In multivariate analyses, unwed motherhood is a stronger risk factor for LBW than either teenaged or older motherhood.

Maternal ethnicity. The share of births to White non-Hispanic mothers steadily declined since the mid-1980s, with the 1990 percent of 57.7 percent the lowest ever recorded (Table 1-3). The proportion of births to Hispanic mothers simultaneously rose from 23 percent in 1980 to 28.1 percent in 1990, with the latter the highest recorded. The annual percents of births to Black and Native American mothers were relatively constant from 1980 to 1990, with the former ranging from 3.3 to 3.8 percent and the latter ranging from 9.1 to 10.0 percent.

Blacks were the only ethnic group of mothers who accounted for a higher share of LBW births than of all births in every year from 1980 to 1990 (Table 1-4). This share varied from a low of 5.5 percent in 1982 to a high of 8.3 percent in 1989.

Early prenatal care. The percent of mothers who entered prenatal care in the first trimester of pregnancy. i.e., early prenatal care, was lower in 1990 than in 1980 but showed a slight improvement over the decade-low rate seen in 1989 (Table 1-3). Moreover, all annual percents of early prenatal care from 1980 to 1987 exceeded the annual percents from 1988 to 1990. In addition, the annual percents of women giving birth after no prenatal care were higher from 1988 to 1990 than from 1980 to 1987 (Figure 4).

Early prenatal care is considered protective rather than a risk factor for LBW. Its protective or preventive role is indicated by the fact that it accounted for a lower share of LBW births than of all births consistently from 1980 to 1990. In contrast, women giving birth after no prenatal care accounted for at least twice as large a proportion of LBW births than of all births in each year from 1980 to 1990 (Table 1-4). However, in 1990 only 6 percent of LBW births were born to mothers with no prenatal care and the annual percent from 1980 to 1990 peaked at just 7.6 percent.

Number of prenatal visits. The major difference between the distribution of prenatal visits in 1980 and in 1990 was at the high end. The proportion of women giving birth with at least 13 visits increased by 28 percent from 22.5 percent in 1980 to 28.9 percent in 1990 (Table 1-3). The percents of women giving birth after 1-4 visits, at least 5 visits, or at least 9 visits all changed less than 10 percent from 1980 to 1990.

Each level of prenatal visits starting at five accounted for a smaller share of LBW births than all births (Table 1-4). However, all years after 1980, including 1990, differed from 1980 and years prior by the fact that the majority of LBW babies were born to mothers who had at least 9 prenatal visits during pregnancy (Figure 5).

Medical risks/complications and caesarean section. The percent of mothers with medical risks during pregnancy and/or complications of labor/delivery increased by 12 percentage points, in numeric terms, from 1980 to 1990. The 46.1 percent in 1990 was an improvement over the percents of at least 50 in 1987 and 1988. This increase in medical risks and/or complications may have contributed to the simultaneous increase in the rate of caesarean sections among women giving birth. Almost one in five women giving birth had a caesarean section in 1990 compared to one in eight in 1980.

Caesarean section and medical risks/complications were both more strongly represented among LBW births than among all births annually from 1980 to 1990. In 1990, LBW births were 74 percent more likely to be delivered by caesarean section than births overall. The proportional share of LBW births compared to all births was 44 percent greater for mothers with medical risks or complications of labor/delivery.

Regional Comparisons in Trends From 1980 to 1990

The declining trend in percent of births to teenaged mothers and the increasing trend in percent of births to mothers older than 29 years of age were seen in both urban and rural regions of the state (Tables 1-5 and 1-6). The increasing trend in unmarried motherhood also was consistent for the two regions, although the rise was steeper for rural than urban births, with increases of 84 and 73 percent respectively. In 1990, the proportion of births to single mothers was 22 percent greater in rural than urban Arizona. Other trends consistent by region were: a) declining proportion of births to white non-Hispanic mothers; b) decreasing percent of women giving birth with early prenatal care; c) rising proportion of mothers who had at least 13 prenatal visits; d) increasing percents of women giving birth with medical risks during pregnancy and complications of labor/delivery; e) growing proportion of women giving birth by caesarean section; and f) increasing rates of LBW, VLBW and prematurity.

A few characteristics differed in temporal trend by region from 1980 to 1990. The percent of mothers with less than 9 years of education declined in rural regions but increased in urban regions, with the 1990 percent for urban mothers the highest of the past 11 years. Hispanic mothers accounted for a growing share of urban births, while Native American mothers did so for rural births. A growing share of rural births were attended by midwives, but midwives played less of an attendant role for urban births.

The rise in rates of LBW was twice as great among rural than urban births, with increases of 9 and 4 percent respectively (Table 1-7). Counties comprising the urban region differed in their LBW temporal trends from 1980 to 1990. Maricopa county increased by 6 percent, Pima county showed strong annual fluctuations but the 1990 rate was almost identical to the 1980 rate, while the LBW rate for Yuma county declined by 17 percent. In 1990, babies born to women residing in Yuma county had a 22 percent lower risk of being LBW than did babies born to women residing in Maricopa county.

County-specific LBW rates for the rural counties varied from a low of 47.2 per 1,000 births for Graham county to a high of 84 per 1,000 births for Coconino county in 1990. The 1990 LBW rate for Coconino county was higher than the annual rates of the past 10 years and exceeded the the last highest rate (1985) by 24 percent. The 1990 LBW was not the lowest of the past 11 years for any county.

Urban LBW babies were more likely to weigh 1,500 or less grams or be very low birthweight (VLBW) than were rural LBW babies (Tables 1-8 and 1-9), a consistent yearly difference from 1980 to 1990. Other consistent annual differences from 1980 to 1990 between LBW babies in the two regions was that urban compared to rural LBW babies were more likely to be premature, to be part of a multiple birthship, to be delivered by caesarean section, to be born to mothers who had at least 9 prenatal visits during pregnancy, and to be the offspring of white non-Hispanic mothers.

Trends by Ethnicity of Mothers From 1980 to 1990

White non-Hispanic mothers and their newborns. From 1980 to 1990, teenaged motherhood fell by 22 percent and older motherhood, i.e., 30 or more years of age, rose by 62 percent among white non-Hispanic women giving birth (Table 1-10). Over those 11 years, the proportion of births to unmarried white non-Hispanic mothers doubled, with more than one in five babies born to a single mother in 1990. More than three-quarters of white non-Hispanic mothers began prenatal care in the first trimester in 1990, somewhat better than the 1980 rate but below the rates seen annually from 1981 to 1984.

Almost 94 percent of white non-Hispanic mothers had at least 5 prenatal visits in 1990, with nearly 80 percent having 9 or more visits. The percent of mothers of this ethnicity with medical risks/complications improved in 1990 from the higher rates seen in the three prior years, but the 1990 rate was still 42 percent higher than the 1980 rate. More than one in five white non-Hispanic mothers delivered by caesarean section in 1990 compared to one in eight in 1980.

The 1990 prematurity rate of babies born to white non-Hispanic mothers was the highest annual rate of the 1980-1990 period, exceeding the 1980 rate by 30 percent. The 1990 VLBW rate of newborns of these mothers also exceeded the rates of the last 11 years, while the 1990 LBW rate was greater than the rates in 9 of the 10 prior years.

In 1990, more than one in five LBW newborns of white non-Hispanic mothers were members of multiple birthships (Table 1-11). There was an eightfold differential in multiple birthships between all births to these mothers and LBW births, with percents of 2.6 and 21.4 respectively. This was the largest differential between all births and LBW births on a characteristic. The next largest differential was on prematurity, with a 5.6 times higher proportion among LBW births than all births. The size of the differentials between all births and LBW births on these two characteristics was relatively constant from 1980 to 1990.

Hispanic mothers and their newborns. Equal proportions of babies were born to teenaged Hispanic mothers and older Hispanic mothers in 1990 (Table 1-12), a unique feature among the ethnic groups. In contrast, in 1980, teenaged motherhood was 35 percent more common than older motherhood. Unmarried Hispanic women accounted for 45 out of every 100 Hispanic births in 1990, compared to 26 out of 100 in 1980. More than one in five Hispanic mothers had less than 9 years of education in 1990, a small improvement over the proportion of 25 percent in 1980.

From 1980 to 1989, the majority of Hispanic women giving birth had early prenatal care; this changed to a minority phenomenon in 1990. Moreover, the percent of early prenatal care among these mothers declined year-by-year beginning in 1983. The 80 percent of Hispanic mothers who had at least 5 prenatal visits in 1990 represented not only no improvement over the 1980 percent but also a deterioration from the higher annual rates from 1981 to 1987. In 1990 compared to 1980, a greater proportion of Hispanic women giving birth had less than 5 prenatal visits; however, a greater proportion also had 13 or more visits. Indeed, the 1990 percent (21) of Hispanic women with 13 or more prenatal visits was the highest annual rate of the 1980 to 1990 period.

A greater proportion of Hispanic women giving birth were delivered by caesarean section in 1990 than in 9 of the 10 prior years. The rate of caesarean section grew from 12.7 percent in 1980 to 16.8 percent in 1990, a 32 percent increase. Hispanic women giving birth were least likely to be attended by midwives in 1990 than during each of the ten years of the 1980s.

Neither the 1990 rate of prematurity nor the 1990 rate of LBW was the highest of the 1980-1990 period for newborns of Hispanic mothers. Moreover, the 1990 prematurity rate was the second lowest of that 11-year time span. In contrast, the 1990 LBW rate was the second highest among those 11 years. In addition, newborns of Hispanic mothers were most likely to be VLBW in 1990 than in any of the 10 prior years.

The majority of Hispanic mothers of LBW newborns were unmarried (Table 1-14). Prematurity accounted for 71 percent of the LBW newborns of Hispanic mothers in

1990 compared to 54 percent in 1980, with prematurity 5.6 times more common among LBW newborns than all newborns of Hispanic mothers. Repeating the differential in rates between all and LBW infants born to white non-Hispanic mothers, LBW newborns of Hispanic mothers also were 8 times more likely to be a member of a multiple birthship than all newborns. Late prenatal care was represented less among LBW babies than among all babies born to Hispanic mothers.

Black mothers and their newborns. Slightly more than 6 out of 10 Black women giving birth in 1990 were unmarried (Table 1-15), a 20 percent increase over the 1980 proportion. The percent of older women among Black mothers almost doubled from 1980 to 1990, while the contribution of teenaged motherhood to births declined by 24 percent. The annual percent of Black mothers with less than 9 years of education was fairly constant from 1980 to 1990.

Early prenatal care varied from a low of 54.7 percent in 1989 to a high of 69.8 percent in 1983, with the 1990 percent of 59.6 below the midpoint of that range. The rate of no prenatal care among Black women giving birth peaked during the 11-year time span at 7.1 percent in 1989, with the 1990 rate of 4.8 percent the second highest rate. All other annual rates were below 4 percent.

The proportion of Black women giving birth after 13 or more prenatal visits grew from 18 percent in 1980 to 25 percent in 1990. The 1990 percent of Black mothers with more than 12 prenatal visits was twice as great as the percent with less than 5 visits. Eight out of ten Black women giving birth in 1990 had five or more prenatal visits.

About one in five Black women giving birth were delivered by caesarean section each year from 1987 to 1990. Proportionally fewer Black women were attended by a midwife during their pregnancy and delivery in 1990 than in each of the prior 10 years.

The 1990 percents of premature newborns and of LBW infants delivered to Black mothers were both the second lowest of the 11-year period from 1980 to 1990. The temporal trend in the percent of VLBW was more erratic, but the annual rates beginning in 1987 to 1990 were higher than the annual rates in the preceding seven years.

Black mothers with either less than 5 prenatal visits or more than 12 prenatal visits accounted for almost equal shares of LBW babies (Table 1-15). More than three-quarters of LBW babies born to Black mothers were also premature. The differences in proportional representation of either prematurity or multiple birthships among LBW babies compared to all babies were smaller for newborns of Black mothers than for newborns of either white non-Hispanic or Hispanic mothers.

Native American mothers and their newborns. In 1990, Native American mothers were 42 percent more likely to be older than 29 years of age than to be teenagers, a reversal of relative standing between the two age groups that held for the first five years of the 1980s (Table 1-16). One-quarter of Native American mothers were at least 30 years old. Almost 60 percent were unmarried. Native American mothers had higher levels of education in 1990 than in 1980. Only 6.5 percent had no more than an elementary school education in 1990 compared to 11.3 percent in 1980.

Only a minority of Native American mothers had early prenatal care in 1990, with the 1990 rate of 46.4 percent the lowest of the 11-year period. However, a corresponding increase in the percent of mothers with no prenatal care did not occur. A majority of Native American women gave birth after at least 9 prenatal visits each year from 1983 to 1989, but not in 1990. Almost 8 out of 10 of these mothers, however, did have at least 5 prenatal visits in 1990.

The increase from 1980 to 1990 in the rate of caesarean sections among Native American mothers was much smaller than the increase for each of the other three ethnic groups. Moreover, Native American mothers have the lowest probability among the ethnic groups of having a caesarean section. The use of midwives increased among Native American women giving birth, while it declined among the other ethnic groups. Since 1987, midwives attended more than 30 percent of Native American births.

The rate of prematurity did not increase from 1980 to 1990 among newborns of Native American mothers. In contrast, the 1990 LBW rate and VLBW rates were the highest of the 11-year period. 1990 marked the first year during that period when the LBW rate of newborns of Native American mothers was at or above 6 percent.

Nearly 75 percent of LBW newborns of Native American mothers were premature in 1990 compared to only 43 percent in 1980, an increase of 74 percent (Table 1-17). The nearly sixfold greater representation of prematurity among LBW babies compared to all babies was again seen among Native Americans. Slightly more than 80 percent of Native American women who deliver LBW babies had medical risks and/or complications in 1990, the highest rate among the maternal ethnic groups.

Newly Formatted or Reported Birth Characteristics: 1990 Status and Comparison with 1989

The Profile in General and by Region and Ethnicity

Payee for the delivery. In 1990, the Arizona Health Care Cost Containment System (AHCCCS) paid for 31 percent of the deliveries, an increase from the 26.5 percent in 1989. A larger proportion of rural than urban deliveries were covered by AHCCCS, with percents of 30 and 36 percent respectively (Table 1-18). Among maternal ethnic groups, Black deliveries had the highest level of AHCCCS coverage at 54 percent, followed by Hispanic deliveries at 49 percent, Native American deliveries at 25 percent, and white non-Hispanic deliveries at 22 percent. The increase in share of deliveries paid for by AHCCCS from 1989 to 1990 was consistent for each regional and ethnic group.

As the share paid for by AHCCCS grew, the share of deliveries paid for by private insurance (PI) fell from 51 percent in 1989 to 48 percent in 1990, becoming a minority rather than majority payee. However, in 1990 as in 1989, PI paid for the majority of deliveries to urban mothers and to white non-Hispanic mothers. It remained the minority payee for rural mothers and the three other maternal ethnic groups. The percent of births paid for by PI fell from 1989 to 1990 for every group in Table 1-18 (see also Figure 6).

The Indian Health Service (IHS) paid for 5.2 percent of the births in 1990, with 95 percent of those births to Native American mothers. The payment source was the mothers themselves and/or their families (i.e., self-pay) in 12 percent of the deliveries, and the payment source was unknown for 4 percent of the deliveries. Each of these 1990 percents differed in numeric terms by less than 1 percent from the 1989 values. Urban mothers and Hispanic mothers were both overrepresented among the self-pay category relative to their contribution to all births.

Medical risk factors during pregnancy. According to reports on the birth certificate, slightly more than one in five women giving birth in 1990 had at least one medical risk during pregnancy, virtually identical to the 1989 percent (Table 1-18).
The virtual stability in the rate of medical risk factors was not consistent either by region or by maternal ethnicity (Table 1-19). From 1989 to 1990, the percent fell from 19.6 to 18.4 for urban women giving birth, while it rose from 24.9 to 29.7 among rural women giving birth. Medical risks were proportionally less common among White non-Hispanic, Hispanic and Black women giving birth, but more common among Native

American women giving birth in 1990 than in 1989 (38 and 35 percent respectively).

Repeating 1989, the most frequently reported medical risk category in 1990 was "other" (Table 1-18). Among the mothers with one of the remaining medical risks, pregnancy associated hypertension and diabetes were each reported for at least 10 percent. Anemia and genital herpes were reported for 5 to 8 percent of the mothers with a medical risk. All other medical risks were reported for no more than 3 percent of the women giving birth who had a medical risk noted on the birth certificate.

Among regional and ethnic groups in 1990, Native American mothers had the highest rate of medical risks at 38 percent, followed by rural mothers at 30 percent, Hispanic mothers at 23 percent, white non-Hispanic mothers at 19 percent, and both urban mothers and Hispanic mothers at 18 percent. Pregnancy associated hypertension was the most prevalent medical risk among each maternal ethnic and regional group with medical risks reported, except Native Americans. The other medical risks affecting at least 5 percent of the mothers with a risk(s) reported were determined in rank-order from high to low for each ethnic or regional group. For urban mothers, they were diabetes, genital herpes and anemia. Anemia, diabetes and previous small-for-gestational age (SGA) infant comprised the ranking for rural mothers. White non-Hispanic mothers were placed at risk by diabetes, genital herpes and anemia. Diabetes and anemia in that order were the risks for Hispanic mothers, while the order between these two risks was reversed for Black mothers. Six factors met the criterion of at least 5 percent for Native American mothers: diabetes, anemia, pregnancy associated hypertension, previous SGA infant, chronic hypertension, and hydramnios.

Substance use. The percent of women giving birth who either smoked or drank alcohol during pregnancy declined from 21.1 percent in 1989 to 16.7 percent in 1990 (Table 1-18). This decrease in use of either tobacco or alcohol during pregnancy was consistent both for regions and ethnic groups. Black mothers showed the largest decline in percentage points among the groups, going from 30.5 percent in 1989 to 21.8 percent in 1990. In 1990, urban mothers used either substance at a higher rate than rural mothers, while white non-Hispanic mothers had the highest rate among ethnic groups.

The number of mothers who used only alcohol during pregnancy fell by almost 50 percent or by nearly 1,300 cases from 1989 to 1990. Almost 1,200 fewer mothers smoked during their pregnancy in 1990 compared to 1989. However, the number of mothers who both smoked and drank alcohol during pregnancy was nearly the same in both years.

Weight gain during pregnancy. The percent of mothers who gained at least 21 pounds during pregnancy rose from 70 percent in 1989 to 73 percent in 1990 (Table 1-18). An increase occurred in every regional group and ethnic group. White non-Hispanic mothers were most likely to gain at least 21 pounds during pregnancy at 81 percent, followed by urban mothers at 75 percent, rural mothers at 68 percent, both Hispanic and Black mothers at 65 percent, and finally Native American mothers at 57 percent.

Obstetric procedures. A greater proportion of women giving birth had one of the obstetric procedures listed in Table 1-18 during their pregnancy in 1990 than in 1989, with percents of 89 and 86 respectively. The increase was noted for mothers in both regions and mothers of each ethnic group. In large part, the overall increase was due to the substantial rise in the proportion of mothers who received ultrasound from 58 percent in 1989 to 68 percent in 1990, an increase of nearly 8,000 mothers. Electronic fetal monitoring, induction of labor, and stimulation of labor also were more frequent in 1990 than in 1989. In contrast, use of amniocentesis and tocolysis dropped from 1989 to 1990.

Method of delivery. A slightly higher proportion of the caesarean sections done in 1990 than in 1989 were primary (Table 1-18). Rates of caesarean section increased for some groups in Table 1-18 and declined for others (Table 1-19). Increased rates, from high to low amounts of change, occurred for Native American mothers, rural mothers and white non-Hispanic mothers. Rates of caesarean section declined for urban, Hispanic and Black mothers by about the same amount. Forceps or vacuum was used in the delivery for 8 percent of mothers in 1989 and 9 percent of mothers in 1990.

Complications of labor and delivery. Approximately 35 percent of births were complicated during labor or delivery in both 1989 and 1990 (Table 1-18). Black and Hispanic, and urban births had a lower complication rate in 1990 than in 1989, while rural, white non-Hispanic and Native American births had a higher rate in 1990 than in 1989 (Table 1-19). Excluding the other category, at least 10 percent of the births reported with a complication in 1990 had, in rank order from high to low, meconium, fetal distress, and breech malpresentation. From high to low, rupture of membranes, cephalopelvic disproportion, and dysfunctional labor each accounted for at least 5 percent but less than 10 percent of the reported complications.

Excluding other, the rank-order of the complications accounting for at least 5 percent of reports was determined separately for each regional or ethnic group. These rank-orders are presented below, with a dash indicating that the complication did not account for 5 percent of the complications reported for a group. W indicates white non-Hispanic, H means Hispanic, B equals Black, and NA denotes Native American, with 1 equaling the highest ranked complication.

Complication	Urban	Rural	W	H	B	NA
Meconium	1	1	1	1	1	1
Rupture of membranes	5	2	5	5	4	2
Other bleeding	-	-	-	-	-	6
Prolonged labor	-	7	-	-	-	7
Dysfunctional labor	-	5	-	-	5	4
Breech malpresentation	2	4	2	3	3	5
Cephalopelvic disproportion	4	6	4	4	6	-
Fetal distress	3	3	3	2	2	3

Abnormal conditions of the newborn. A slightly higher proportion of newborns were reported with an abnormal condition in 1990 than in 1989, with percents of 7.7 and 7.3 respectively (Table 1-18). Newborns of mothers in each ethnic group showed an increase from 1989 to 1990, with the 24 percent increase for newborns of Native American mothers the largest among the ethnic groups. In contrast, from 1989 to 1990, the proportion of newborns of urban mothers with a reported abnormal condition declined by 7 percent, while the proportion rose among newborns of rural mothers by 50 percent (Table 1-19). Almost 11 percent of newborns of rural mothers had an abnormal condition in 1990 compared to 6.8 percent of infants of urban mothers, the highest and lowest rates respectively among the regional and ethnic groups.

The two assisted ventilation conditions, i.e., less than and more than 30 minutes, were the first and second most common newborn abnormal conditions among those that accounted for at least 5 percent of the reports and with other excluded. This ranking applied to newborns of mothers in each region and of each ethnicity, except for Native Americans, when it was reversed. Newborns of Native American mothers were also the exception to the third most common condition for all other groups, namely hyaline membrane disease. Meconium aspiration accounted for 5 percent of reported conditions only for newborns of rural mothers and of Native American mothers, with it ranking fourth and third respectively.

Congenital anomalies. Two percent of infants in 1989 compared to 1.6 percent of infants in 1990 were born with a congenital anomaly (Table 1-18). The rate of congenital anomalies declined from 1989 to 1990 among urban newborns but increased among rural newborns (Table 1-19). A decline in rate also was seen for newborns of mothers of every ethnic group except Native Americans. Newborns of Native American mothers had the highest rate at 2.7 percent, followed by rural newborns at 2.5 percent. Urban newborns had the lowest rate at 1.3 percent.

Save for newborns of Native American mothers, the four most common congenital anomalies among those reported were other respiratory/circulatory anomalies, cleft lip/palate, heart malformations, and other urogenital anomalies for every other region and maternal ethnicity group. Other urogenital anomalies, heart malformations, other musculoskeletal anomalies, and Down's syndrome were the four most frequently reported anomalies for newborns of Native American mothers.

Newborn intensive care. About 4 percent of infants were admitted to newborn intensive care units (NICUs) in 1989 and 1990. Because the birth rate increased, that 4 percent translated into a bigger caseload for NICUs. The proportion of admissions was stable from 1989 to 1990 only for rural newborns and Native American newborns (Table 1-19). Rates of admission increased for rural newborns and infants of white non-Hispanic mothers or Hispanic mothers. Admission rates for newborns of Black mothers dropped from 6.8 percent in 1989 to 6.1 percent in 1990.

The Profile by an Index of Socioeconomic Status, Payee for Delivery

Payee for the delivery was related to another index of socioeconomic status (SES), years of maternal education (Table 1-20). Mothers with private health insurance (PHI) were 4.4 times more likely to have some college education than were mothers covered by the Arizona Health Care Cost Containment System (AHCCCS). AHCCCS mothers also were less likely to have some college education than Indian Health Service (IHS) mothers (18 percent), self-pay mothers (27 percent) and unknown pay mothers (30 percent). These findings suggest that AHCCCS and PHI mothers are the low and high ends of the SES continuum respectively, with the other payee groups intermediate.

Other demographic characteristics of mothers. In 1990 compared to 1989, AHCCCS mothers were slightly more likely to be teenagers, while mothers in the other payee groups were less likely to be teenagers (Table 1-21). More than one in four AHCCCS mothers but only one in 17 PHI mothers were teenagers in 1990 (Table 1-20). The representation among births of older mothers, when defined either as older than 29 years or older than 34 years, increased for each payee group. Older mothers accounted for 36.5 percent of PHI births but only 15.1 percent of AHCCCS births.

PHI births were the only payee group to which unwed mothers made a smaller contribution in 1990 than in 1989 (Table 1-21). Sixty percent of AHCCCS mothers were unwed compared to 12 percent of PHI mothers. Single women accounted for 57 percent of IHS births, 37 percent of unknown pay births, and 30 percent of self pay births.

Early prenatal care and prenatal visits. The rate of entering prenatal care in the first trimester of pregnancy, i.e., early prenatal care, improved from 1989 to 1990 for AHCCCS, PHI and self pay mothers but not for IHS and unknown pay mothers (Table 1-21). In 1990, nearly 85 percent of PHI mothers had early prenatal care compared to 59 percent of self pay mothers, 52 percent of unknown pay mothers, and 46 percent of both AHCCCS and IHS mothers (Table 1-20). At least 11 percent of AHCCCS, IHS, and unknown pay mothers entered prenatal care in the third trimester of pregnancy.

From 1989 to 1990, less than five prenatal visits became proportionally lower among every payee group except IHS mothers (Table 1-21). In 1990, 18.7 percent of IHS mothers had less than 5 prenatal visits, followed by 16.5 percent of AHCCCS mothers, 15.4 percent of unknown pay mothers, 15.1 percent of self pay mothers, and only 2.7 percent of PHI mothers (Table 1-20). Eighty-five percent of PHI mothers and 64 percent of self pay mothers had 9 or more prenatal visits, while no more than 54 percent of AHCCCS, unknown pay, and IHS mothers had this amount of prenatal care.

Medical risk factors during pregnancy. From 1989 to 1990, the proportion of mothers who had medical risks during pregnancy increased from 21 to 26 percent among unknown pay mothers and from 37 to 41 percent among IHS mothers, while the proportion fell among mothers in each of the three other payee groups (Table 1-21). IHS mothers had the highest rate of medical risks in 1990 at 41 percent, followed by unknown pay mothers at 26 percent, AHCCCS mothers at 23 percent, PHI mothers at 18 percent, and self pay mothers at 15 percent (Table 1-20).

The medical risks, with other excluded, that accounted for at least 5 percent of the mothers reported with a risk were determined for each payee group. Pregnancy associated hypertension, diabetes and anemia were the only risks that met the 5 percent criterion for AHCCCS, self pay and unknown pay mothers. These three risks were common to mothers in each payee group. PHI mothers had one additional risk with a 5 percent share, namely genital herpes. Having a previous birth weighing 4000 or more grams or having a SGA infant were two more risks that met criterion for IHS mothers.

Substance use and weight gain during pregnancy . The use of alcohol and/or tobacco during pregnancy declined from 1989 to 1990 for mothers in each payee group, with at least a 25 percent decrease evidenced by AHCCCS, self pay, and unknown pay mothers (Table 1-20). However, in 1990 as in 1989, AHCCCS mothers had the highest rate of alcohol use and/or smoking among the payee groups at 25 percent. The next highest user group was self pay mothers at 17 percent, followed by PHI mothers at 13 percent, unknown pay mothers at 10 percent, and lastly IHS mothers at 6 percent.

The proportion of mothers who gained at least 21 pounds during pregnancy increased from 1989 to 1990 for each payee group (Table 1-20). In 1990, 81 percent of PHI mothers, 69 percent of self pay mothers, 68 percent of AHCCCS mothers, 60 percent of unknown pay mothers, and 56 percent of IHS mothers gained more than 20 pounds during pregnancy. At the low end of the weight distribution, IHS mothers were the most likely payee group to gain no more than 10 pounds during pregnancy.

Obstetric procedures. Mothers who were self pay were less likely to have any obstetric procedure during their pregnancy in 1990 than in 1989, while mothers in each of the other payee groups were more likely (Table 1-21). Having no obstetric procedure was 5.8 times more likely in 1990 among self pay than among PHI mothers, with percents of 25.5 and 4.4 respectively. The 1990 percents of no obstetric procedure of the other three payee groups fell between the two extremes of PHI and self pay mothers. About 8 percent of IHS mothers, 14 percent of AHCCCS mothers, and 21 percent of unknown pay mothers had no obstetric procedure during their pregnancy in 1990 (Table 1-20).

Electronic fetal monitoring and ultrasound were the two most common obstetric procedures for each payee group, with their relative ranking as first and second differing by group. The proportion of mothers who received the top ranked obstetric procedure varied greatly by payee, going from a low of 53 percent for self pay mothers, to 65 percent for AHCCCS mothers, to 68 percent for unknown pay mothers, to 78 percent for PHI mothers, and lastly to 82 percent for IHS mothers.

Complications of labor and/or deliver and method of delivery. From 1989 to 1990, the proportion of births with a complication during labor and/or delivery decreased when AHCCCS or self was the payee, but increased among IHS, PHI or unknown payee groups (Table 1-21). The 1990 highest rate of complications of labor and/or delivery occurred among IHS births at 40 percent, followed by PHI births at 36 percent, AHCCCS births at 35 percent, unknown pay births at 34 percent, and self pay births at 28 percent. Meconium was the most frequent complication for each payee group, when other was excluded (Table 1-20). For each payee group except IHS, the second most common complication was breech malpresentation, while rupture of membranes occupied either third or fourth position.

The rate of caesarean section slightly increased from 1989 to 1990 among self pay, IHS and PHI mothers, but either remained stable or declined for the other payee groups (Table 1-21). Twenty-two percent of PHI mothers delivered by caesarean section in 1990, followed by 17 percent of AHCCCS mothers, 14 percent of either self or unknown pay mothers, and 11 percent of IHS mothers (Table 1-20).

Abnormal conditions of the newborn. Newborns of either AHCCCS or unknown pay mothers had a lower rate of abnormal conditions in 1989 or 1990, while higher rates were seen in newborns of mothers in the three other payee groups (Table 1-21). An abnormal condition was reported in 1990 for 10 percent of infants born to AHCCCS mothers, 8 percent of births to IHS mothers, 7 percent of the babies delivered by self pay mothers, 6 percent of newborns of PHI mothers, and less than 6 percent of infants born to unknown pay mothers (Table 1-20). Assisted ventilation, which lasted either less or more than 30 minutes, was the most common abnormal condition of infants born to mothers in every payee group.

Prematurity, low birthweight (LBW) and newborn intensive care. From 1989 to 1990, the percent of babies born prematurely rose for mothers in every payee group, with the 6 percent increase for babies born to AHCCCS mothers the largest. Prematurity characterized 14.8 percent of AHCCCS births, 13.1 percent of unknown pay births, 12.8 percent of PHI births, 12.7 percent of self pay births, and 11.4 percent of IHS births in 1990.

In contrast to prematurity, LBW rates only rose from 1989 to 1990 for babies born either to AHCCCS or self pay mothers (Table 1-21). LBW declined by 10 percent for unknown pay births, by 6 percent for IHS births, and by 3 percent for PHI births. In 1990 as in 1989, babies of IHS mothers had the lowest LBW rate at 4.8 percent. Infants of PHI mothers had the next lowest LBW rate at 5.6 percent, followed by newborns of self pay mothers at 6.1 percent, babies of unknown pay mothers at 6.6 percent, and finally newborns of AHCCCS mothers at 8.1 percent (Table 1-20).

A greater proportion of newborns of AHCCCS, self pay or IHS mothers were admitted to newborn intensive care in 1990 than in 1989 (Table 1-21). Admission rates to newborn intensive care (NIC) dropped 29 percent for infants of unknown pay mothers and remained stable for babies of PHI mothers. The drop in NIC made infants of unknown pay mothers have the second lowest admission rate to newborn intensive care in 1990 rather than the second highest as they did in 1989. Newborns of AHCCCS mothers were most likely to be admitted in both years, with the 1990 rate being 4.6 percent. The 3.9 percent admission rate for babies of PHI mothers was next highest in 1990, followed by 3.8 percent of infants of self pay mothers, 2.9 percent of babies of unknown pay mothers, and 2.3 percent of newborns of IHS mothers (Table 1-20).

Congenital anomalies. From 1989 to 1990, the proportion of births with any congenital anomaly increased from 2.9 to 4.3 percent for unknown pay mothers and from 1.9 to 2.7 percent for IHS mothers (Table 1-21). For babies to mothers in the three other payee groups, the proportion fell, with the decrease largest for babies of AHCCCS mothers. In 1989, rates of congenital anomalies varied from 1.6 (PHI) to 2.9 percent (unknown pay). In 1990, the range became larger, with a low of 1.2 percent (PHI) and a high of 4.3 percent (unknown pay). The 1990 rank-order between these two extremes was babies of self pay mothers at 1.4 percent, infants of AHCCCS mothers at 1.7 percent, and newborns of IHS mothers at 2.4 percent (Table 1-20).

Risk Factors for Premature, Low Birthweight (LBW) and Term, LBW Babies

The strongest risk factor for LBW among babies is prematurity. Babies who are born preterm are 17.9 times more likely to be LBW than babies carried to term (35.8 and 2.0 percent, respectively). Moreover, prematurity is a factor common to 74 percent of LBW babies. Reducing prematurity would significantly reduce the risk of LBW (Figure 7).

At this point, several characteristics first are examined to determine if they may be a risk factor for prematurity and then examined if they are risk factors for LBW. The final step then subjects these same characteristics to an assessment regarding their risk relation to term, LBW births. The characteristics in Tables 1-22 and 1-23 selected for examination as a risk factor conformed to general listings in the research literature. A characteristic or category of a characteristic was considered a risk factor for a birth outcome if it met two criteria: 1) the rate of prematurity, LBW, or term and LBW associated with it was at least 50 percent higher than the statewide rate, and 2) at least 10 births were recorded with the adverse outcome. The risk factors discussed below usually overlap considerably. Thus, their effects are not independent and additive.

Risk factors for premature babies. Twenty (20) factors were associated with at least a 50 percent elevation in the risk of babies being born prematurely (Table 1-22). Eight of the 20 were medical risk factors , 6 were complications of labor/delivery and 2 were fetal development factors (i.e., congenital anomalies and plural births). The remaining included maternal low weight gain during pregnancy; mother less than 15 years old; mother having no prenatal care; and mother having only 1-4 prenatal visits.

However, 13 of these 20 factors accounted for less than 5 percent of the 9,184 premature births. From lowest (n = 10) to highest number (n = 346) of premature births, these included seizures; maternal cardiac disease; mother less than 15 years old; other maternal bleeding; uterine bleeding; placenta previa; chronic hypertension; hydramnios; eclampsia; previous SGA infant; abruptio placenta; any congenital anomaly of baby; and maternal diabetes. The remaining factors which did account for at least 5 percent of premature births were rank-ordered in terms of their proportional contribution from high to low. The rank order and the premature (PMT) rate for each factor are given below.

Risk Factor	PMT Rate	# Premature
Gained <21 pounds	21.8%	2,188
Plural birth	68.0%	1,066
One to 4 prenatal visits	20.4%	999
Breech malpresentation	33.0%	818
Ruptured membranes	38.6%	667
Pregnancy-associated hypertension	27.5%	485
No prenatal care	25.0%	470

Risk factors for LBW babies. Seventeen (17) of the 20 factors that elevated the risk for prematurity also elevated the risk for LBW by at least 50 percent based on at least 10 LBW births. Maternal smoking during pregnancy, mother being Black, and fetal distress meet the risk criteria for LBW but not for prematurity. Maternal cardiac disease, maternal diabetes, and seizures, risk factors for prematurity, were not risk factors for LBW. Eleven of the factors related to elevated LBW rates accounted for at least 5 percent of the 4,451 LBW births. These are given below in a manner identical to the listing for the prematurity risk factors.

Risk Factor	LBW Rate	# LBW
Gained <21 pounds	11.8%	1,338
Smoked during pregnancy	10.4%	1,065
Plural birth	51.3%	805
One to 4 prenatal visits	11.8%	580
Breech malpresentation	22.2%	551

Ruptured membranes	24.2%	418
Fetal distress	12.0%	299
Mother is Black	11.5%	295
Pregnancy-associated hypertension	16.7%	294
No prenatal care	14.2%	267
Any congenital anomaly	20.4%	222

Risk Factors For Term, LBW Babies. As clearly seen in Table 1-23, the large differential in LBW rate between preterm and term babies seen for all births also holds across almost the entire array of factors examined earlier. The interest now is in those factors related to a LBW rate that exceeds the 2 percent LBW rate among term babies by 50 percent. An elevation in risk of 50 percent translates into a LBW rate for term babies of 3 percent, 40 percent better than the Year 1990 and the Year 2000 objective of a LBW rate of 5 percent. This fact further highlights the pivotal role of prematurity in the causation of LBW in Arizona.

Fifteen (15) factors elevated the LBW rate to at least 3 percent based on at least 10 LBW births. No risk factor was unique or had not occurred when either LBW or prematurity was the birth outcome, with 11 common to the risk factors for both outcomes. The majority of these factors accounted for at least 5 percent of the 1,165 term, LBW babies. Again, a rank ordering based on frequency was done and is given below.

Risk Factor	Term, LBW Rate	# Term LBW
Smoked during pregnancy	3.8%	326
Gained <21 pounds	3.1%	286
One to 4 prenatal visits	3.0%	118
Plural birth	19.5%	98
Fetal distress	4.0%	84
Breech malpresentation	4.6%	77
Mother is Black	3.3%	69
No prenatal care	4.5%	63

TABLE 1-1

BIRTH RATES[1] BY ARIZONA COUNTY OF RESIDENCE, ARIZONA AND UNITED STATES,[2] 1980-1990

AREA	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	15.8	15.9	15.9	15.5	15.5	15.8	15.6	15.7	15.9	16.2	16.7
ARIZONA	18.4	18.4	18.2	18.0	17.9	18.6	18.1	18.3	18.2	18.0	18.8
Apache	31.2	32.0	33.1	31.4	34.9	32.9	29.0	29.7	29.4	26.8	29.2
Cochise	18.1	18.5	17.3	17.2	17.7	16.2	15.6	16.0	16.0	16.5	17.8
Coconino	24.3	21.6	21.2	22.2	22.0	22.6	20.5	21.8	20.7	20.9	20.3
Gila	19.0	20.2	21.2	17.5	17.7	16.8	15.7	14.2	16.3	15.9	18.6
Graham	22.4	21.9	19.6	18.0	18.6	17.4	16.1	18.0	17.0	17.9	16.0
Greenlee	23.8	24.7	19.5	15.4	17.1	18.5	11.1	12.9	11.6	11.0	13.1
La Paz[3]	NA	NA	NA	17.3	14.5	16.3	15.2	14.0	15.0	15.0	11.7
Maricopa	17.8	17.9	17.8	17.6	17.7	18.8	18.5	18.4	18.4	18.2	19.0
Mohave	15.6	15.6	15.5	15.5	15.2	13.3	13.8	14.8	15.0	16.2	15.9
Navajo	28.1	26.2	26.6	26.5	26.3	26.2	25.6	26.2	25.2	25.1	25.4
Pima	16.8	16.6	16.1	16.5	16.0	16.5	16.2	15.6	16.4	15.8	17.1
Pinal	20.2	20.3	20.5	19.3	18.8	20.5	19.8	19.8	19.0	18.5	18.3
Santa Cruz	24.4	24.5	22.3	20.6	22.8	19.3	18.3	18.7	22.1	22.6	26.4
Yavapai	13.8	14.3	14.8	14.0	12.3	12.4	12.3	12.3	13.1	12.3	11.3
Yuma	19.8	21.3	20.0	20.1	20.4	21.8	22.4	22.0	22.9	25.0	22.9

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[1] Rates are presented per 1,000 population.

[2] U.S. data from the National Center for Health Statistics; rates for 1989 and 1990 are provisional and rates for 1980-1988 are final.

[3] Included in Yuma County prior to 1983.

TABLE 1-2

GENERAL FERTILITY RATE,[1] TOTAL FERTILITY RATE,[2] AND AGE-SPECIFIC BIRTH RATES[3] BY MOTHER'S ETHNICITY, ARIZONA, 1980 AND 1990

			AGE OF MOTHER:									
				15-19 years								
Ethnic Group/Year	General Fertility Rate	Total Fertility Rate	Under 15	Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45 + years
Total, All Ethnic Groups:[4]												
1980	80.1	2,141	1.3	66.1	41.6	100.3	137.4	123.9	67.6	26.6	5.0	0.3
1990	82.1	2,418	1.5	75.6	47.6	112.5	174.8	106.6	84.8	33.9	6.2	0.2
Non-Hispanic White:												
1980	69.5	1,853	0.6	51.0	27.8	83.4	120.5	114.5	61.3	19.1	3.5	0.1
1990	68.4	2,221	0.6	52.1	28.6	81.0	143.2	116.7	91.9	34.3	5.2	0.2
Hispanic:												
1980	108.5	2,831	1.9	100.3	72.1	139.1	183.0	151.0	83.3	35.6	10.1	0.9
1990	116.7	3,183	2.6	120.7	82.0	177.3	240.2	127.2	94.5	40.8	10.1	0.5
Black:												
1980	95.1	2,347	6.0	100.6	77.3	132.7	169.4	112.0	55.8	18.5	7.0	-
1990	95.5	2,793	4.9	121.2	88.4	170.1	224.7	101.3	75.8	27.0	3.6	-
Native American:												
1980	128.5	3,462	2.8	104.2	73.7	146.3	208.5	174.9	111.1	66.9	22.7	1.2
1990	127.5	3,550	3.0	107.7	64.5	174.1	258.4	137.1	119.5	64.3	19.2	0.7

[1] The general fertility rate is the total number of live births per 1,000 women of childbearing age (15-44 years old).

[2] The total fertility rate is the sum of each age-specific live birth rate multiplied by the number of years in the age group (five years in this case). In Table 1-2 the rate of 2,418 in 1990, for example, means that if a hypothetical group of 1,000 women were to have the same birth rates in each age group that were observed in the actual childbearing population in 1990, they would have a total of 2,418 children by the time they reached the end of the reproductive period (taken here as age 50), assuming that all of the women survived to that age.

[3] The age-specific live birth rate is the number of live births per 1,000 women in a specific age-group. For females under 15, the rate is calculated using the female population 10-14 years of age. For women over 44 the rate is calculated using the female population 45-49 years of age.

[4] Includes other ethnic groups.

TABLE 1-3

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (ALL ETHNIC GROUPS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	50,049	51,620	52,628	52,919	55,109	59,344	60,822	63,320	65,544	67,128	68,814
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	16.6	16.0	15.6	14.8	13.8	13.5	13.8	13.9	13.8	14.0	14.2
≥ 30 years	18.7	19.6	20.3	21.1	22.0	22.9	23.6	24.5	25.4	26.4	27.4
MARITAL STATUS:											
Unmarried	18.7	19.4	20.5	22.1	23.3	23.9	25.6	27.1	28.6	30.7	32.6
MOTHER'S EDUCATION:											
< 9 years	8.6	8.2	7.5	7.0	7.0	7.1	7.1	6.8	6.9	8.4	8.3
MOTHER'S ETHNIC GROUP:											
White[1]	63.1	63.0	63.5	63.6	63.8	64.0	62.5	62.6	60.8	58.8	57.7
Hispanic	23.0	23.0	22.1	21.7	21.9	22.0	23.1	22.7	24.3	26.3	28.1
Black	3.3	3.4	3.4	3.4	3.5	3.3	3.5	3.6	3.7	3.8	3.7
Native American	9.6	9.4	9.9	10.0	9.6	9.2	9.4	9.5	9.5	9.4	9.1
Other	1.1	1.1	1.1	1.2	1.2	1.5	1.4	1.6	1.7	1.6	1.4
PRENATAL CARE BEGAN:											
1st trimester	68.8	72.5	73.5	71.9	70.5	70.1	70.1	68.7	66.2	64.5	66.2
3rd trimester	5.7	4.9	4.7	5.2	6.1	5.8	6.2	6.7	7.2	8.2	7.2
No care	2.1	2.0	2.0	2.1	2.1	2.0	1.9	2.2	2.6	3.6	2.7
PRENATAL VISITS:											
1-4	6.5	5.8	5.7	5.8	6.4	6.0	6.5	6.7	7.2	7.4	7.1
≥ 5	87.3	89.2	90.9	90.6	90.2	90.5	89.5	89.3	87.9	86.3	88.1
≥ 9	66.8	69.0	71.3	71.9	72.9	71.5	70.4	71.8	70.2	68.0	70.6
≥ 13	22.5	23.7	24.3	25.3	26.7	26.1	28.4	29.2	28.0	27.6	28.9
MEDICAL RISKS/ COMPLICATIONS:[2]	33.8	36.3	37.2	38.8	39.7	40.2	43.2	50.2	52.1	46.6	46.1
GESTATIONAL AGE:[3]											
< 38 weeks	11.6	11.7	11.4	11.7	11.7	12.5	12.5	12.6	12.8	12.6	13.4
BIRTH WEIGHT:											
≤ 2,500 grams	6.2	6.0	5.8	6.1	6.1	6.3	6.2	6.5	6.3	6.4	6.5
≤ 1,500 grams	0.9	0.9	0.8	1.0	1.0	1.0	1.1	1.2	1.0	1.0	1.3
CHILD'S SEX:											
Male	51.4	51.1	51.5	51.6	51.3	51.0	51.0	51.1	51.2	51.4	51.0
Female	48.6	48.9	48.5	48.4	48.7	49.0	49.0	48.9	48.8	48.6	49.0
PLURALITY:											
Multiple births	1.9	1.8	1.6	2.0	1.8	1.8	1.9	2.1	2.0	2.0	2.3
CAESAREAN DELIVERY:	12.8	14.0	14.5	14.8	15.7	16.4	18.1	18.4	17.0	18.8	18.6
PLACE OF DELIVERY:											
Hospital[4]	98.4	98.6	98.6	98.5	98.6	98.7	96.8	97.0	97.2	98.4	98.7
ATTENDANT AT BIRTH:											
Midwife[5]	6.4	6.5	6.5	6.4	6.3	6.8	6.7	7.0	7.3	7.8	6.3
PREVIOUS LIVE BIRTHS:											
1 or more	58.1	58.5	59.1	59.8	61.0	60.6	60.8	61.4	62.2	61.8	62.1

[1] Non-Hispanic.

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-4

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (ALL ETHNIC GROUPS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	3,089	3,103	3,076	3,204	3,377	3,712	3,786	4,107	4,110	4,279	4,451
					PERCENT OF LOW-BIRTHWEIGHT BIRTHS:						
AGE OF MOTHER:											
≤ 19 years	20.7	20.2	18.7	20.9	16.8	17.3	17.1	18.1	16.7	17.0	18.2
≥ 30 years	18.0	18.6	19.2	19.2	22.2	23.3	24.4	24.0	26.2	27.5	29.4
MARITAL STATUS:											
Unmarried	28.1	27.8	27.7	33.8	32.7	33.1	34.0	35.5	37.7	39.6	41.3
MOTHER'S EDUCATION:											
< 9 years	10.3	10.4	8.4	8.3	8.0	8.8	9.0	7.5	8.1	7.8	9.1
MOTHER'S ETHNIC GROUP:											
White[1]	59.8	59.8	61.5	59.3	61.7	61.8	60.1	61.2	57.5	56.7	55.5
Hispanic	24.1	22.3	23.1	23.1	21.9	21.5	23.2	21.6	24.5	24.5	27.8
Black	6.2	7.4	5.5	7.8	7.0	6.7	7.3	7.2	8.2	8.3	6.6
Native American	9.1	9.2	8.9	8.8	7.9	8.5	8.0	8.2	8.2	8.5	8.5
Other	1.0	1.2	1.0	1.1	1.4	1.5	1.5	1.7	1.7	2.0	1.6
PRENATAL CARE BEGAN:											
1st trimester	64.6	69.3	71.9	71.3	69.4	68.1	66.1	64.7	63.1	59.4	62.5
3rd trimester	5.6	4.6	4.5	4.1	6.0	4.9	5.2	6.2	6.3	7.3	6.4
No care	4.9	5.4	5.5	5.5	4.6	4.3	4.6	4.7	6.3	7.6	6.0
PRENATAL VISITS:											
1-4	13.0	11.1	11.1	10.3	11.3	10.7	13.0	12.5	12.9	12.4	13.0
≥ 5	75.1	78.9	80.9	81.4	81.9	82.1	77.8	79.0	77.3	76.0	78.0
≥ 9	45.3	51.0	54.2	56.3	58.8	57.4	52.9	55.7	53.3	52.0	54.4
≥ 13	13.6	13.8	15.7	16.1	20.7	18.9	20.3	21.4	21.3	20.7	22.5
MEDICAL RISKS/ COMPLICATIONS:[2]	56.7	57.2	58.1	59.0	57.9	59.8	64.2	70.1	72.1	68.5	66.4
GESTATIONAL AGE:[3]											
< 38 weeks	53.9	55.2	53.7	55.8	55.5	58.0	67.9	67.1	64.5	73.1	73.8
BIRTH WEIGHT:											
≤ 1,500 grams	14.7	15.2	13.8	16.1	15.6	16.5	18.0	17.9	16.5	15.9	19.7
≤ 1,000 grams	7.2	6.9	6.6	6.8	7.2	7.8	8.3	8.8	8.1	8.5	10.9
CHILD'S SEX:											
Male	47.7	46.8	46.0	48.8	45.5	47.8	48.6	47.6	47.9	47.5	47.7
Female	52.3	53.2	54.0	51.2	54.5	52.2	51.4	52.4	52.1	52.5	52.3
PLURALITY:											
Multiple births	15.3	15.1	13.4	16.4	14.3	15.7	16.5	17.5	17.3	16.5	18.1
CAESAREAN DELIVERY:	20.7	21.4	25.1	26.0	28.1	29.5	31.5	32.6	29.3	30.5	32.0
PLACE OF DELIVERY:											
Hospital[4]	98.5	98.6	98.6	99.1	99.3	99.5	97.6	97.5	97.4	98.8	98.1
ATTENDANT AT BIRTH:											
Midwife[5]	3.2	3.7	2.5	2.4	2.3	2.7	2.3	2.4	2.9	2.8	2.2
PREVIOUS LIVE BIRTHS:											
1 or more	55.0	56.2	57.0	56.2	58.1	58.5	58.3	59.5	59.4	59.4	59.4

[1] Non-Hispanic.

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-5

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (URBAN REGIONS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	35,700	36,930	37,753	38,343	40,389	44,058	45,757	47,548	49,325	50,436	54,274
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	16.1	15.0	14.8	14.1	13.2	12.9	13.1	13.1	13.1	13.3	13.5
≥ 30 years	18.8	20.0	20.4	21.5	22.3	23.1	24.0	24.7	25.9	27.1	27.9
MARITAL STATUS:											
Unmarried	18.0	18.3	19.5	20.9	21.9	22.5	24.1	25.4	27.1	29.2	31.2
MOTHER'S EDUCATION:											
< 9 years	8.3	7.9	7.1	6.7	6.7	7.0	6.9	6.5	6.7	8.4	8.8
MOTHER'S ETHNIC GROUP:											
White[1]	68.4	68.4	69.0	69.0	69.3	69.3	67.6	67.8	65.8	63.6	61.1
Hispanic	23.6	23.4	22.6	22.3	22.2	22.4	23.6	23.2	24.6	26.8	29.9
Black	3.9	4.1	4.0	4.1	4.1	3.9	4.1	4.1	4.2	4.4	4.2
Native American	3.0	2.9	3.0	3.2	3.0	2.8	3.2	3.1	3.4	3.4	3.1
Other	1.0	1.3	1.4	1.4	1.4	1.6	1.6	1.8	2.0	1.8	1.6
PRENATAL CARE BEGAN:											
1st trimester	73.2	77.8	78.5	76.8	75.1	74.2	73.8	72.5	69.8	68.2	68.9
3rd trimester	4.2	3.3	3.3	3.7	4.8	4.6	5.0	5.6	6.0	6.9	6.4
No care	1.6	1.6	1.6	1.7	1.8	1.6	1.6	1.8	2.2	3.4	2.8
PRENATAL VISITS:											
1-4	4.6	3.9	3.9	4.2	5.0	4.8	5.4	5.7	6.4	6.5	6.1
≥ 5	88.8	91.3	93.6	93.1	92.3	92.5	90.8	90.7	89.1	87.2	89.1
≥ 9	71.0	74.0	76.9	77.1	78.0	75.9	73.8	74.9	73.4	71.1	72.5
≥ 13	24.3	26.1	26.8	27.7	29.4	28.4	30.1	30.4	29.6	29.5	31.1
MEDICAL RISKS/ COMPLICATIONS:[2]	33.4	36.5	36.8	38.0	39.4	39.5	42.9	51.3	52.8	46.4	44.9
GESTATIONAL AGE:[3]											
< 38 weeks	11.5	11.6	11.2	11.7	11.7	12.4	12.3	12.5	12.5	12.9	13.4
BIRTH WEIGHT:											
≤ 2,500 grams	6.1	6.0	5.7	6.0	6.2	6.2	6.2	6.5	6.2	6.3	6.4
≤ 1,500 grams	0.9	1.0	0.8	1.0	1.0	1.2	1.1	1.2	1.0	1.1	1.3
CHILD'S SEX:											
Male	51.4	51.4	51.4	51.5	51.4	51.1	51.1	51.2	51.3	51.4	51.1
Female	48.6	48.6	48.6	48.5	48.6	48.9	48.9	48.8	48.7	48.6	48.9
PLURALITY:											
Multiple births	1.9	2.0	1.7	2.0	1.9	1.8	2.0	2.2	2.0	2.1	2.4
CAESAREAN DELIVERY:	13.5	14.8	15.1	15.2	16.4	17.3	18.8	19.4	18.0	19.4	19.0
PLACE OF DELIVERY:											
Hospital[4]	99.8	98.7	98.6	98.6	98.7	98.7	98.5	98.5	98.6	98.9	98.7
ATTENDANT AT BIRTH:											
Midwife[5]	5.8	6.1	6.3	6.1	5.5	5.1	5.0	4.9	5.5	5.8	4.5
PREVIOUS LIVE BIRTHS:											
1 or more	56.1	57.1	57.5	58.2	59.1	59.0	59.1	59.7	60.1	60.3	60.7

[1] Non-Hispanic.

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-6

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (RURAL REGIONS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	14,349	14,690	14,875	14,576	14,720	15,286	15,065	15,772	16,219	16,692	14,540
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	17.8	18.3	17.8	16.6	15.6	15.2	15.7	16.1	15.9	15.8	16.8
≥ 30 years	18.3	18.7	20.0	20.2	21.3	22.6	22.6	23.1	23.7	24.5	25.7
MARITAL STATUS:											
Unmarried	20.6	22.0	23.1	25.4	27.0	27.7	30.4	32.1	32.8	35.2	38.0
MOTHER'S EDUCATION:											
< 9 years	9.2	9.1	8.5	7.8	7.8	7.4	7.7	7.5	7.5	8.4	6.7
MOTHER'S ETHNIC GROUP:											
White[1]	50.1	49.2	49.6	49.4	48.9	48.6	47.3	46.8	45.4	44.3	45.2
Hispanic	21.3	22.2	20.8	20.0	21.0	21.0	21.6	21.4	23.5	25.0	21.2
Black	1.6	1.8	1.9	1.8	1.8	1.8	2.0	2.1	2.0	1.9	1.8
Native American	26.1	25.9	26.8	27.9	27.7	27.7	28.2	28.9	28.2	27.7	31.2
Other	1.0	0.9	0.8	0.9	0.7	1.0	0.9	0.8	0.9	1.1	0.7
PRENATAL CARE BEGAN:											
1st trimester	57.6	59.0	60.8	58.9	58.0	58.1	58.6	57.3	55.1	53.3	55.9
3rd trimester	9.4	8.7	8.5	9.2	9.7	26.7	9.7	10.1	10.9	12.2	10.4
No care	3.2	3.0	3.1	3.2	3.2	3.1	2.8	3.2	4.0	4.3	2.6
PRENATAL VISITS:											
1-4	11.1	10.3	10.3	10.0	10.0	9.4	9.7	9.4	9.5	9.9	10.9
≥ 5	83.4	84.2	84.1	84.1	84.5	85.0	85.0	85.4	84.2	83.2	84.6
≥ 9	56.3	56.4	57.0	58.3	59.0	59.2	59.6	62.5	60.4	58.2	59.8
≥ 13	18.0	17.6	17.9	18.9	19.4	19.6	23.1	25.5	23.2	21.7	20.7
MEDICAL RISKS/ COMPLICATIONS:[2]	34.8	35.8	38.3	40.6	40.6	42.2	43.8	46.8	50.2	47.2	50.7
GESTATIONAL AGE:[3]											
< 38 weeks	11.7	11.9	11.7	11.6	11.6	12.7	13.1	13.1	13.8	11.9	13.3
BIRTH WEIGHT:											
≤ 2,500 grams	6.3	6.1	6.1	6.3	6.0	6.3	6.3	6.3	6.5	6.7	6.9
≤ 1,500 grams	0.8	0.8	0.7	1.0	0.8	0.9	1.1	1.0	1.0	0.9	1.2
CHILD'S SEX:											
Male	51.5	50.2	51.6	51.8	51.0	50.9	50.8	50.9	51.0	51.3	50.8
Female	48.5	49.8	48.4	48.2	49.0	49.1	49.2	49.1	49.0	48.7	49.2
PLURALITY:											
Multiple births	1.8	1.4	1.4	2.0	1.5	1.8	1.9	1.9	2.1	1.9	1.9
CAESAREAN DELIVERY:	10.9	12.2	12.9	13.7	13.7	13.9	16.2	15.3	14.1	16.5	17.2
PLACE OF DELIVERY:											
Hospital[4]	94.8	98.5	98.5	98.2	98.5	98.5	92.0	92.4	92.9	97.1	98.7
ATTENDANT AT BIRTH:											
Midwife[5]	8.0	7.4	6.9	7.3	8.4	11.6	11.8	13.1	12.7	14.0	13.0
PREVIOUS LIVE BIRTHS:											
1 or more	62.9	61.8	63.0	63.9	64.5	65.3	65.3	66.2	65.0	66.2	67.5

[1] Non-Hispanic.

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-7

LOW-BIRTHWEIGHT RATES[1] IN THE UNITED STATES[2] AND IN URBAN AND RURAL COUNTIES OF ARIZONA, 1980 - 1990

County of Residence	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
UNITED STATES	68.4	68.1	67.5	68.2	67.2	67.5	68.1	69.0	69.2	NA	NA
ARIZONA	61.7	60.1	58.4	60.5	61.3	62.5	62.2	64.9	62.7	63.7	64.7
URBAN COUNTIES:	61.3	60.0	57.4	59.5	61.6	62.3	62.0	65.3	62.1	62.8	63.7
Maricopa	60.8	59.9	57.9	58.9	62.8	62.0	63.2	65.9	62.5	62.7	64.7
Pima	62.6	60.1	55.8	61.8	58.1	63.2	58.2	63.6	60.7	63.3	62.8
Yuma[3]	60.2	49.4	48.9	55.9	58.8	47.4	49.3	58.9	63.0	49.3	50.2
RURAL COUNTIES:	62.9	60.6	61.2	63.3	60.3	63.3	62.8	63.4	64.6	66.6	68.5
Apache	60.2	64.8	63.4	62.1	60.0	73.9	73.4	64.8	60.8	62.9	65.0
Cochise	72.6	74.1	71.4	90.1	77.3	66.7	57.1	67.9	59.8	71.1	64.4
Coconino	61.4	64.6	54.3	66.4	62.3	67.8	61.8	57.3	60.5	63.2	84.0
Gila	53.9	44.7	66.7	45.4	61.0	56.1	80.0	56.2	75.9	59.9	64.1
Graham	54.7	84.5	47.0	46.0	29.2	71.4	73.4	33.7	62.2	62.5	47.2
Greenlee	51.5	50.2	43.0	54.1	51.3	43.5	37.7	56.5	36.0	86.5	47.6
La Paz[4]	NA	NA	NA	105.9	51.3	68.4	83.7	50.5	51.4	78.3	74.1
Mohave	66.6	53.0	81.3	56.2	66.8	53.7	58.5	68.8	71.8	77.6	66.5
Navajo	62.1	66.6	50.5	53.4	57.4	57.5	58.5	68.1	59.3	80.3	76.6
Pinal	57.4	63.2	72.2	61.0	55.7	66.9	67.2	68.2	64.9	60.1	68.0
Santa Cruz	66.1	40.5	65.2	52.5	31.3	87.9	69.4	65.8	87.2	57.1	75.3
Yavapai	90.8	50.1	61.9	70.7	72.1	63.4	54.9	67.5	73.9	86.8	68.0

[1] Per 1,000 live births.
[2] U.S. data furnished by the National Center for Health Statistics.
[3] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.
[4] Included in Yuma county prior to 1983.

TABLE 1-8

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (URBAN REGIONS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	2,187	2,213	2,166	2,287	2,489	2,774	2,839	3,107	3,062	3,168	3,455
	PERCENT OF LOW-BIRTHWEIGHT BIRTHS:										
AGE OF MOTHER:											
≤ 19 years	21.0	19.4	18.7	21.0	15.9	17.3	16.6	16.8	15.5	16.2	18.0
≥ 30 years	17.5	18.5	19.0	19.3	22.9	22.9	24.0	24.3	26.2	27.5	29.2
MARITAL STATUS:											
Unmarried	28.3	26.9	27.6	33.5	31.7	33.2	33.7	34.8	37.5	39.1	41.4
MOTHER'S EDUCATION:											
< 9 years	10.6	10.5	7.9	8.1	8.0	8.1	8.8	7.1	7.4	7.9	10.0
MOTHER'S ETHNIC GROUP:											
White[1]	63.5	63.2	66.1	62.4	65.2	65.7	63.7	64.7	61.4	59.3	57.9
Hispanic	25.3	23.7	24.0	24.4	22.6	22.0	23.9	22.3	24.1	25.4	29.8
Black	7.7	9.1	6.4	9.3	8.5	7.9	8.5	8.3	9.6	10.4	7.7
Native American	2.7	2.6	2.3	2.5	2.2	2.7	2.2	2.5	2.8	2.9	2.7
Other	0.9	1.4	1.2	1.3	1.6	1.7	1.7	2.1	2.0	2.0	1.7
PRENATAL CARE BEGAN:											
1st trimester	68.4	74.7	76.2	75.2	72.9	71.5	68.8	67.8	66.8	62.8	64.7
3rd trimester	4.2	3.5	3.4	3.1	5.1	3.8	4.5	5.6	5.1	6.0	5.7
No care	4.5	3.8	4.4	4.7	4.2	3.7	4.2	4.3	5.5	7.2	6.0
PRENATAL VISITS:											
1-4	11.0	9.1	9.2	8.5	9.8	9.5	12.0	11.7	11.7	11.5	12.2
≥ 5	76.3	81.9	84.2	84.5	84.5	84.5	79.1	80.4	79.2	76.9	78.7
≥ 9	48.6	55.6	59.2	61.1	62.6	61.1	55.8	57.7	55.2	54.5	56.6
≥ 13	14.1	15.5	17.7	17.5	22.3	20.9	21.9	22.6	23.2	22.8	24.0
MEDICAL RISKS/ COMPLICATIONS:[2]	53.9	55.9	55.6	56.6	57.7	59.0	62.7	70.5	73.7	67.4	64.6
GESTATIONAL AGE:[3]											
< 38 weeks	55.3	57.3	55.1	57.2	57.1	59.3	68.7	66.8	65.3	74.2	74.8
BIRTH WEIGHT:											
≤ 1,500 grams	15.4	15.9	14.5	16.3	16.5	17.0	18.3	18.3	16.7	16.8	20.5
≤ 1,000 grams	7.5	7.5	6.9	7.1	7.7	8.4	8.5	9.3	8.6	8.9	11.1
CHILD'S SEX:											
Male	47.2	46.2	46.7	49.3	45.2	47.6	48.1	47.1	47.9	46.8	47.4
Female	52.8	53.8	53.3	50.7	54.8	52.4	51.9	52.8	52.1	53.2	52.6
PLURALITY:											
Multiple births	15.8	16.6	13.6	16.3	15.2	16.0	17.0	18.0	17.9	17.7	18.9
CAESAREAN DELIVERY:	21.5	21.8	24.9	26.5	28.4	30.1	31.8	33.0	30.8	31.7	31.9
PLACE OF DELIVERY:											
Hospital[4]	99.8	98.7	98.8	99.3	99.3	99.6	98.9	98.6	98.4	99.0	98.9
ATTENDANT AT BIRTH:											
Midwife[5]	2.5	3.3	2.3	2.6	1.9	1.8	1.3	1.5	2.1	1.8	1.4
PREVIOUS LIVE BIRTHS:											
1 or more	54.0	55.8	54.8	55.3	57.8	56.6	56.2	58.3	58.8	59.2	57.7

[1] Non-Hispanic

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-9

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (RURAL REGIONS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	902	890	910	917	888	967	946	1,000	1,048	1,111	996
	PERCENT OF LOW-BIRTHWEIGHT BIRTHS:										
AGE OF MOTHER:											
< 19 years	20.0	22.2	18.7	20.6	19.3	17.2	18.6	22.3	19.9	19.1	18.8
≥ 30 years	19.2	18.8	19.7	18.9	20.2	24.3	25.4	22.8	26.3	27.7	30.2
MARITAL STATUS:											
Unmarried	27.7	30.1	28.0	34.6	35.5	33.1	34.9	37.6	38.4	41.1	41.3
MOTHER'S EDUCATION:											
< 9 years	9.6	10.2	9.3	8.9	8.0	10.5	9.6	8.6	10.0	7.8	7.8
MOTHER'S ETHNIC GROUP:											
White[1]	50.8	51.5	50.7	51.4	52.1	50.9	49.2	50.4	45.9	49.1	47.2
Hispanic	21.1	19.0	21.0	19.6	20.0	20.0	20.9	19.4	25.7	22.1	20.7
Black	2.4	3.1	3.3	4.0	2.7	3.1	3.7	3.8	4.0	2.5	2.8
Native American	24.5	25.6	24.5	24.3	24.1	25.0	25.5	25.9	23.8	24.5	28.4
Other	1.2	0.8	0.5	0.7	1.0	1.0	0.7	0.5	0.7	1.8	0.9
PRENATAL CARE BEGAN:											
1st trimester	55.3	56.0	61.8	61.8	59.5	58.5	58.0	55.1	52.5	49.8	54.6
3rd trimester	9.0	7.4	7.0	6.7	8.6	8.0	7.0	8.1	9.7	11.0	8.7
No care	5.9	9.3	8.0	7.3	5.7	6.0	5.9	6.0	8.9	8.6	6.1
PRENATAL VISITS:											
1-4	18.1	16.0	15.5	14.6	15.7	14.1	15.9	14.9	16.3	15.0	15.8
> 5	72.2	71.2	72.9	73.6	74.5	75.0	74.2	74.6	71.8	73.2	75.2
≥ 9	37.3	39.4	42.4	44.2	47.9	46.6	44.6	49.5	47.2	44.8	46.5
≥ 13	12.4	9.6	11.0	12.6	16.0	13.1	15.8	17.8	15.9	14.7	17.3
MEDICAL RISKS/ COMPLICATIONS:[2]	63.6	60.4	63.8	65.0	58.6	62.2	68.6	69.0	67.5	71.6	72.7
GESTATIONAL AGE:[3]											
< 38 weeks	50.7	50.1	50.2	52.5	57.0	54.3	65.3	68.2	62.0	69.8	70.5
BIRTH WEIGHT:											
< 1,500 grams	13.0	13.3	12.2	15.3	13.1	14.9	17.0	16.5	16.1	13.7	16.9
≤ 1,000 grams	6.3	5.3	5.8	5.9	5.9	6.0	7.5	7.0	6.7	7.6	10.0
CHILD'S SEX:											
Male	48.9	48.2	44.3	47.3	46.5	48.5	49.9	49.0	47.7	49.6	48.7
Female	51.1	51.8	55.7	52.7	53.5	51.5	50.1	51.0	52.3	50.4	51.3
PLURALITY:											
Multiple births	14.3	11.6	13.0	16.6	11.9	14.9	15.0	15.9	15.6	13.1	15.3
CAESAREAN DELIVERY:	18.7	20.2	25.6	24.8	27.1	27.7	30.7	31.1	25.0	27.5	32.2
PLACE OF DELIVERY:											
Hospital[4]	95.2	98.5	98.1	98.8	99.2	99.2	93.6	94.2	94.4	98.6	95.5
ATTENDANT AT BIRTH:											
Midwife[5]	4.9	4.6	3.2	2.0	3.4	5.4	5.3	5.1	5.2	5.7	4.9
PREVIOUS LIVE BIRTHS:											
1 or more	57.4	57.3	62.2	58.3	59.0	63.8	64.8	63.3	61.4	60.0	65.3

[1] Non-Hispanic

[2] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[3] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[4] Hospital, clinic, medical center or maternity home.

[5] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-10

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (WHITE NON-HISPANIC MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	31,957	32,495	33,419	33,664	35,183	37,972	38,044	39,616	39,821	39,484	39,733
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	13.3	12.7	12.2	11.5	10.5	10.6	10.4	10.7	10.5	10.4	10.4
≥ 30 years	19.5	20.6	21.3	22.7	23.9	24.5	25.8	26.9	28.2	29.8	31.5
MARITAL STATUS:											
Unmarried	10.5	11.1	11.9	12.7	13.7	14.9	15.9	17.1	18.4	20.1	21.0
MOTHER'S EDUCATION:											
< 9 years	2.3	2.1	2.0	1.9	1.9	2.0	1.9	1.8	1.8	3.3	2.4
PRENATAL CARE BEGAN:											
1st trimester	75.5	78.7	79.0	78.3	77.7	76.9	77.2	76.0	74.7	74.0	76.9
3rd trimester	4.0	3.3	3.3	3.4	4.1	4.0	4.3	4.8	4.8	5.4	4.2
No care	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.4	1.7	1.2
PRENATAL VISITS:											
1-4	3.7	3.3	3.4	3.4	3.8	3.8	4.0	4.0	4.1	4.4	3.9
≥ 5	92.5	93.1	94.4	94.3	94.3	94.2	93.6	93.6	92.9	91.8	93.8
≥ 9	75.2	76.9	78.1	78.7	80.2	78.6	78.4	79.3	78.7	77.3	79.8
≥ 13	26.7	28.2	28.0	30.0	31.6	30.6	33.6	34.1	33.0	32.9	34.8
MEDICAL RISKS/ COMPLICATIONS:[1]	32.4	35.8	37.1	37.8	39.3	39.7	42.9	49.5	50.4	56.4	46.1
GESTATIONAL AGE:[2]											
< 38 weeks	10.2	10.3	10.3	10.3	10.3	11.2	11.2	11.3	11.4	12.4	13.3
BIRTH WEIGHT:											
≤ 2,500 grams	5.8	5.7	5.7	5.6	5.9	6.0	6.0	6.3	5.9	6.1	6.2
≤ 1,500 grams	0.9	0.8	0.8	0.9	0.9	1.0	1.0	1.1	0.9	1.0	1.2
CHILD'S SEX:											
Male	51.4	51.5	51.8	51.5	51.4	51.4	51.6	51.3	51.6	51.4	51.4
Female	48.6	48.5	48.2	48.5	48.6	48.6	48.4	48.7	48.4	48.6	48.6
PLURALITY:											
Multiple births	1.8	1.9	1.8	2.0	1.9	1.9	2.0	2.3	2.1	2.2	2.6
CAESAREAN DELIVERY:	12.8	14.5	15.0	15.2	16.2	17.4	19.2	19.8	18.3	20.3	20.3
PLACE OF DELIVERY:											
Hospital[3]	99.1	98.2	98.2	98.1	98.3	98.3	97.2	97.3	97.6	98.2	97.6
ATTENDANT AT BIRTH:											
Midwife[4]	4.2	4.8	4.9	5.2	4.8	4.4	4.2	4.0	4.5	4.5	3.3
PREVIOUS LIVE BIRTHS:											
1 or more	55.2	55.4	55.8	56.7	57.7	57.7	58.1	58.4	58.5	58.8	59.1

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-11

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (WHITE NON-HISPANIC MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	1,846	1,857	1,892	1,899	2,085	2,294	2,273	2,514	2,362	2,426	2,472
					PERCENT OF LOW-BIRTHWEIGHT BIRTHS:						
AGE OF MOTHER:											
≤ 19 years	16.7	16.9	14.0	17.0	13.2	13.6	13.3	14.6	12.9	12.8	14.1
≥ 30 years	19.6	19.3	20.7	20.5	24.1	24.1	26.0	26.2	29.0	31.4	33.2
MARITAL STATUS:											
Unmarried	16.8	17.3	16.9	22.8	21.7	24.5	22.3	25.7	27.2	28.4	29.7
MOTHER'S EDUCATION:											
< 9 years	3.6	3.3	2.2	3.4	3.3	3.2	3.6	2.7	3.3	3.3	3.2
PRENATAL CARE BEGAN:											
1st trimester	71.7	75.8	78.5	74.7	75.0	74.6	72.1	70.4	69.6	66.7	71.1
3rd trimester	3.7	3.9	3.2	2.7	5.0	3.7	3.7	5.1	5.1	6.0	4.7
No care	2.8	3.7	2.9	3.3	2.7	2.8	2.9	2.8	4.6	5.2	3.7
PRENATAL VISITS:											
1-4	10.0	8.7	8.4	7.7	9.6	7.8	10.3	9.7	9.1	9.4	9.9
≥ 5	82.0	84.1	86.4	86.9	85.8	86.7	82.7	84.6	83.8	82.2	84.0
≥ 9	51.9	57.2	59.0	61.0	63.2	63.4	58.9	62.0	61.0	59.4	62.7
≥ 13	16.3	16.4	17.7	19.7	25.2	23.0	23.9	26.5	26.0	23.7	27.7
MEDICAL RISKS/ COMPLICATIONS:[1]	58.1	57.8	59.2	59.1	58.0	61.5	65.7	70.7	73.4	68.2	68.8
GESTATIONAL AGE:[2]											
< 38 weeks	55.3	56.3	55.5	55.7	55.3	59.6	68.7	67.8	65.4	73.2	74.8
BIRTH WEIGHT:											
≤ 1,500 grams	15.0	14.8	13.8	16.4	14.5	16.7	17.4	17.6	15.3	15.6	19.5
≤ 1,000 grams	7.6	6.7	6.9	6.7	6.8	7.8	8.3	8.8	7.2	8.1	10.6
CHILD'S SEX:											
Male	47.8	47.2	46.9	48.8	44.0	48.1	48.1	46.2	47.9	46.7	48.4
Female	52.2	52.8	53.1	51.2	56.0	51.9	51.9	53.7	52.1	53.3	51.6
PLURALITY:											
Multiple births	16.7	15.1	15.2	16.7	14.9	16.8	16.8	19.9	19.6	19.4	21.4
CAESAREAN DELIVERY:	21.2	21.5	25.4	27.3	27.8	31.2	32.5	34.5	30.6	32.5	34.5
PLACE OF DELIVERY:											
Hospital[3]	99.3	98.8	98.5	99.5	99.2	99.6	98.4	97.8	98.3	98.8	98.7
ATTENDANT AT BIRTH:											
Midwife[4]	1.5	2.1	1.7	1.7	1.6	1.2	0.9	1.1	1.6	1.5	1.1
PREVIOUS LIVE BIRTHS:											
1 or more	53.9	52.2	54.3	52.9	55.3	55.3	56.0	56.7	57.2	56.8	57.4

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-12

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (HISPANIC MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	11,495	11,896	11,630	11,477	12,067	13,062	14,044	14,402	15,952	17,663	19,321
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	22.2	21.1	21.9	20.6	19.8	19.4	20.0	20.0	19.4	19.6	20.4
≥ 30 years	16.5	17.3	17.9	17.8	17.8	18.8	18.8	18.7	19.3	20.2	20.1
MARITAL STATUS:											
Unmarried	26.0	26.8	28.8	32.3	34.5	34.7	36.4	38.7	39.4	41.5	45.1
MOTHER'S EDUCATION:											
< 9 years	25.2	24.5	22.5	21.6	21.5	21.8	21.6	20.6	20.1	21.2	21.9
PRENATAL CARE BEGAN:											
1st trimester	59.2	64.1	65.3	62.4	59.8	59.3	58.8	57.5	52.4	50.5	48.6
3rd trimester	7.8	6.8	6.8	7.9	9.9	9.1	9.6	10.0	11.6	12.6	11.9
No care	3.2	3.2	3.4	3.9	4.5	4.0	3.6	4.0	5.0	7.1	5.2
PRENATAL VISITS:											
1-4	9.2	8.2	7.9	9.1	10.3	9.2	10.5	10.6	11.9	11.2	11.0
≥ 5	79.8	83.6	87.0	85.5	83.8	85.0	83.1	82.4	79.7	77.7	80.3
≥ 9	55.1	58.4	61.8	62.0	62.2	60.1	57.1	59.5	56.4	54.8	56.9
≥ 13	16.1	16.6	17.9	16.6	17.9	17.5	19.1	20.3	19.2	20.0	21.0
MEDICAL RISKS/ COMPLICATIONS:[1]	31.7	32.9	33.2	35.7	36.3	35.5	38.7	47.6	51.1	42.9	42.0
GESTATIONAL AGE:[2]											
< 38 weeks	13.0	13.4	13.0	13.5	12.8	13.9	13.5	14.0	14.0	12.2	12.7
BIRTH WEIGHT:											
≤ 2,500 grams	6.5	5.8	6.1	6.4	6.1	6.1	6.2	6.2	6.3	5.9	6.4
≤ 1,500 grams	0.9	1.0	0.8	1.0	1.1	1.0	1.1	1.0	1.1	0.9	1.2
CHILD'S SEX:											
Male	51.8	50.8	51.1	51.8	51.3	51.0	49.9	51.1	50.7	51.8	50.6
Female	48.2	49.2	48.9	48.2	48.7	49.0	50.1	48.9	49.3	48.2	49.4
PLURALITY:											
Multiple births	2.1	1.7	1.6	2.1	1.6	1.8	1.9	2.1	1.8	1.8	1.8
CAESAREAN DELIVERY:	12.7	13.5	13.7	14.1	14.6	14.7	16.6	16.7	15.6	17.1	16.8
PLACE OF DELIVERY:											
Hospital[3]	99.7	99.3	99.2	99.1	99.2	99.1	98.1	98.0	98.1	98.5	98.8
ATTENDANT AT BIRTH:											
Midwife[4]	5.5	5.5	5.4	4.9	4.7	5.5	5.1	5.2	5.5	6.3	4.6
PREVIOUS LIVE BIRTHS:											
1 or more	62.1	62.9	64.7	65.0	65.8	65.4	64.4	64.8	64.7	64.3	63.9

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational ag were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-13

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (HISPANIC MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	743	693	711	739	740	798	877	887	1,008	1,049	1,237
	PERCENT OF LOW-BIRTHWEIGHT BIRTHS:										
AGE OF MOTHER:											
≤ 19 years	27.5	23.8	29.0	28.1	24.5	24.1	25.8	26.3	24.0	23.7	26.2
≥ 30 years	14.3	17.9	16.2	17.1	17.7	22.4	21.6	17.7	20.9	20.7	21.6
MARITAL STATUS:											
Unmarried	37.8	33.2	39.7	43.4	45.0	42.6	45.6	44.2	47.2	48.1	53.7
MOTHER'S EDUCATION:											
< 9 years	25.6	29.1	24.2	21.0	21.4	23.8	23.5	21.1	19.8	18.8	23.0
PRENATAL CARE BEGAN:											
1st trimester	55.0	63.2	63.2	64.5	62.3	57.9	57.2	55.9	52.2	50.7	50.0
3rd trimester	8.6	4.8	6.0	5.7	8.2	5.8	7.3	8.9	7.8	9.5	8.6
No care	7.1	6.9	7.9	8.7	7.8	6.8	7.4	7.7	9.8	10.6	8.6
PRENATAL VISITS:											
1-4	15.1	12.6	12.8	12.4	12.3	13.8	16.5	16.0	17.9	15.6	16.0
≥ 5	67.3	73.9	76.0	76.1	78.0	76.1	71.8	72.0	67.6	69.1	71.5
≥ 9	37.8	46.6	49.7	52.4	53.4	49.7	44.7	47.3	41.2	44.6	45.4
≥ 13	10.6	10.8	12.9	11.4	12.6	11.5	14.5	13.5	12.9	18.0	15.8
MEDICAL RISKS/ COMPLICATIONS:[1]	52.1	56.0	52.6	59.5	55.7	55.0	58.4	66.1	68.6	65.5	59.3
GESTATIONAL AGE:[2]											
< 38 weeks	54.2	54.7	55.3	57.8	53.5	55.0	68.5	65.3	63.9	72.1	70.7
BIRTH WEIGHT:											
≤ 1,500 grams	13.9	16.5	13.8	15.4	17.7	15.9	17.7	16.4	17.5	15.5	18.7
≤ 1,000 grams	6.5	6.6	5.3	6.6	8.0	7.3	8.1	7.4	8.5	8.5	10.4
CHILD'S SEX:											
Male	48.2	46.8	44.2	48.7	48.8	48.1	48.8	49.0	49.4	49.1	46.4
Female	51.8	53.2	55.8	51.3	51.2	51.9	51.2	50.8	50.5	50.9	53.6
PLURALITY:											
Multiple births	16.0	15.0	11.3	18.4	13.1	15.8	18.5	15.7	14.3	13.7	14.8
CAESAREAN DELIVERY:	19.2	21.6	23.3	24.9	29.6	26.2	30.1	30.1	28.7	30.3	29.5
PLACE OF DELIVERY:											
Hospital[3]	99.6	99.4	98.9	98.9	99.5	99.5	98.3	99.1	98.6	99.0	98.8
ATTENDANT AT BIRTH:											
Midwife[4]	3.1	3.0	3.0	2.4	1.2	2.4	1.5	2.4	1.9	1.7	1.4
PREVIOUS LIVE BIRTHS:											
1 or more	54.2	61.9	59.2	60.8	61.9	61.5	58.7	61.2	59.8	60.2	58.1

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-14

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (BLACK MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	1,634	1,759	1,800	1,820	1,911	1,969	2,157	2,289	2,406	2,528	2,562
	PERCENT OF LIVE BIRTHS:										
AGE OF MOTHER:											
≤ 19 years	27.2	26.5	24.6	26.0	23.4	21.9	22.3	22.6	22.9	23.5	21.9
≥ 30 years	11.1	11.9	12.4	12.9	13.3	15.0	16.6	16.4	17.6	18.3	19.4
MARITAL STATUS:											
Unmarried	50.9	50.8	52.2	52.4	54.8	54.9	55.0	57.1	57.9	61.3	61.2
MOTHER'S EDUCATION:											
< 9 years	3.0	2.6	2.1	1.9	2.8	2.8	2.5	2.8	3.1	2.7	2.5
PRENATAL CARE BEGAN:											
1st trimester	62.7	67.0	69.8	68.3	63.6	63.6	63.8	61.0	57.8	54.7	59.6
3rd trimester	5.8	5.3	5.8	4.9	6.8	7.9	7.1	8.3	8.0	8.5	7.6
No care	2.3	2.8	2.4	2.5	2.5	2.9	2.8	2.8	3.3	7.1	4.8
PRENATAL VISITS:											
1-4	8.0	8.0	8.1	7.0	8.0	8.5	9.2	11.4	11.3	12.1	11.6
≥ 5	77.4	83.2	87.3	88.1	88.0	86.1	84.0	82.0	80.9	76.3	80.0
≥ 9	54.8	60.0	67.7	68.0	67.7	63.6	61.4	61.2	59.3	55.1	59.2
≥ 13	18.1	19.7	24.3	21.8	23.8	21.5	23.4	22.6	24.5	22.0	24.7
MEDICAL RISKS/ COMPLICATIONS:[1]	33.7	33.4	32.2	35.2	35.8	35.3	41.5	49.6	54.4	52.2	47.5
GESTATIONAL AGE:[2]											
< 38 weeks	20.1	20.8	17.6	20.7	19.7	20.5	20.0	19.6	20.0	21.2	18.7
BIRTH WEIGHT:											
≤ 2,500 grams	11.6	13.0	9.3	13.7	12.3	12.5	12.8	13.0	13.9	14.1	11.5
≤ 1,500 grams	2.4	2.8	1.7	2.6	2.4	2.4	2.8	3.1	3.2	3.2	2.9
CHILD'S SEX:											
Male	52.0	51.1	51.1	52.3	50.9	48.6	52.6	50.2	50.3	50.3	51.1
Female	48.0	48.9	48.9	47.7	49.1	51.4	47.4	49.8	49.7	49.7	48.9
PLURALITY:											
Multiple births	1.6	3.4	1.5	3.3	2.6	2.0	2.9	1.8	3.4	2.7	2.5
CAESAREAN DELIVERY:	15.1	15.3	16.4	16.3	18.6	18.4	19.5	20.2	20.2	20.1	19.8
PLACE OF DELIVERY:											
Hospital[3]	99.4	99.4	99.4	99.2	99.6	99.3	99.0	98.6	98.2	99.1	98.9
ATTENDANT AT BIRTH:											
Midwife[4]	6.5	8.6	7.4	5.8	5.4	5.2	3.9	5.1	5.2	5.6	4.6
PREVIOUS LIVE BIRTHS:											
1 or more	58.6	59.5	59.8	60.7	60.1	64.0	63.1	65.8	65.3	63.6	66.5

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[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-15

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (BLACK MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	190	229	168	249	236	247	276	297	335	357	295
	PERCENT OF LOW-BIRTHWEIGHT BIRTHS:										
AGE OF MOTHER:											
≤ 19 years	34.2	28.8	28.0	29.3	24.6	32.0	22.8	23.6	19.1	20.4	24.1
≥ 30 years	10.0	9.6	13.1	9.2	16.1	13.8	17.8	19.5	18.2	17.9	23.1
MARITAL STATUS:											
Unmarried	65.8	60.7	57.7	63.5	64.8	60.7	67.8	67.7	64.2	67.5	69.5
MOTHER'S EDUCATION:											
< 9 years	7.9	3.9	4.8	3.6	2.5	3.6	4.7	3.0	4.5	3.2	2.4
PRENATAL CARE BEGAN:											
1st trimester	59.5	65.9	66.7	72.7	67.4	61.9	59.1	56.9	64.8	50.4	57.3
3rd trimester	6.8	2.6	6.5	2.8	4.2	5.7	8.0	6.4	6.0	6.2	6.8
No care	6.8	4.8	5.4	6.0	5.1	4.9	5.4	5.4	5.7	14.0	9.2
PRENATAL VISITS:											
1-4	15.3	12.2	14.9	8.4	11.9	14.2	15.6	21.5	17.6	17.1	18.6
≥ 5	61.6	73.4	77.9	80.4	81.3	78.2	71.3	67.1	70.8	59.9	68.1
≥ 9	36.3	42.4	55.3	57.1	57.6	50.7	46.7	41.8	45.1	38.9	44.1
≥ 13	8.4	12.7	21.4	14.5	14.8	13.0	17.4	13.5	19.1	16.5	19.7
MEDICAL RISKS/ COMPLICATIONS:[1]	44.7	51.1	42.9	45.8	52.1	46.6	62.0	65.3	68.4	67.5	59.7
GESTATIONAL AGE:[2]											
< 38 weeks	58.4	61.6	51.8	61.8	60.2	57.9	61.2	66.0	63.9	74.8	76.6
BIRTH WEIGHT:											
≤ 1,500 grams	21.1	21.8	17.9	18.9	19.1	19.4	21.8	23.9	23.3	22.7	25.4
≤ 1,000 grams	9.5	16.2	10.7	10.8	9.3	10.5	9.1	13.1	15.2	13.2	15.3
CHILD'S SEX:											
Male	46.3	42.8	45.8	45.8	45.3	45.3	52.9	49.2	41.2	42.9	46.1
Female	53.7	57.2	54.2	54.2	54.7	54.7	47.1	50.8	58.8	57.1	53.9
PLURALITY:											
Multiple births	7.4	18.8	9.5	14.9	14.4	12.1	14.5	9.1	17.6	12.0	13.9
CAESAREAN DELIVERY:	19.5	20.1	18.5	20.5	26.7	22.7	29.3	28.6	23.9	24.1	24.8
PLACE OF DELIVERY:											
Hospital[3]	99.5	98.3	99.4	99.6	99.6	99.6	97.8	99.0	94.9	98.0	98.3
ATTENDANT AT BIRTH:											
Midwife[4]	2.1	7.0	0.6	3.2	3.0	2.4	1.8	1.0	2.4	1.7	1.4
PREVIOUS LIVE BIRTHS:											
1 or more	57.4	60.7	60.7	58.2	60.6	65.6	67.4	66.3	68.1	65.5	66.4

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-16

LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (NATIVE AMERICAN MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF BIRTHS:	4,796	4,878	5,137	5,297	5,265	5,478	5,718	6,036	6,240	6,338	6,23
						PERCENT OF LIVE BIRTHS:					
AGE OF MOTHER:											
≤ 19 years	22.5	22.8	21.9	20.4	19.8	18.3	19.0	18.2	18.3	17.9	17.7
≥ 30 years	19.6	19.8	19.4	19.4	20.7	22.5	21.9	23.3	23.3	23.4	25.0
MARITAL STATUS:											
Unmarried	46.1	47.1	48.5	51.2	52.0	51.9	55.2	56.1	57.1	57.8	59.9
MOTHER'S EDUCATION:											
< 9 years	11.3	10.9	10.1	9.1	8.9	8.1	8.0	7.8	7.0	6.7	6.5
PRENATAL CARE BEGAN:											
1st trimester	49.0	54.0	57.1	53.0	48.7	50.1	52.7	50.4	49.5	46.8	46.4
3rd trimester	11.9	10.1	9.0	11.1	11.2	10.1	10.0	10.7	11.5	14.0	12.5
No care	6.6	5.4	5.5	5.0	4.2	3.5	3.2	4.1	3.8	4.4	4.1
PRENATAL VISITS:											
1-4	17.9	15.4	14.7	13.4	13.9	12.5	12.8	12.5	13.5	14.1	14.6
≥ 5	73.5	77.3	78.0	78.5	78.1	80.0	79.7	80.4	79.4	78.4	79.2
≥ 9	43.2	46.5	49.3	51.2	50.3	52.9	53.0	55.4	54.2	50.4	49.9
≥ 13	12.3	13.3	15.0	15.6	15.6	17.8	19.3	20.7	20.0	18.1	17.4
MEDICAL RISKS/ COMPLICATIONS:[1]	49.4	48.6	48.9	52.4	51.5	57.1	57.0	60.7	64.8	57.0	59.3
GESTATIONAL AGE:[2]											
< 38 weeks	14.5	13.9	12.6	13.1	15.1	15.4	16.0	15.0	16.2	12.1	13.1
BIRTH WEIGHT:											
≤ 2,500 grams	5.8	5.9	5.3	5.3	5.1	5.8	5.3	5.6	5.4	5.7	6.1
≤ 1,500 grams	0.7	0.6	0.6	0.7	0.7	0.9	1.0	1.1	0.8	0.8	1.2
CHILD'S SEX:											
Male	50.8	49.4	50.1	51.9	50.6	49.4	49.7	50.4	50.6	49.9	50.3
Female	49.2	50.6	49.9	48.1	49.4	50.6	50.3	49.6	49.4	50.1	49.7
PLURALITY:											
Multiple births	1.7	1.5	0.8	1.3	1.2	1.3	1.2	1.3	1.5	1.4	1.3
CAESAREAN DELIVERY:	11.7	11.5	12.3	12.7	13.2	12.6	13.9	12.0	10.8	12.1	13.0
PLACE OF DELIVERY:											
Hospital[3]	99.5	99.3	99.4	99.3	99.3	99.7	90.7	91.4	92.0	99.3	91.8
ATTENDANT AT BIRTH:											
Midwife[4]	23.2	19.8	18.6	17.9	20.4	27.7	28.3	31.7	30.1	34.2	31.9
PREVIOUS LIVE BIRTHS:											
1 or more	67.5	67.3	67.3	67.6	68.5	69.5	68.6	71.7	70.7	73.6	74.7

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-17

LOW-BIRTHWEIGHT BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1980-1990 (NATIVE AMERICAN MOTHERS)

Characteristic:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF LBW BIRTHS:	280	286	273	281	268	316	303	338	336	363	378
	PERCENT OF LOW-BIRTHWEIGHT BIRTHS:										
AGE OF MOTHER:											
≤ 19 years	21.1	28.7	19.4	21.4	18.7	17.4	17.8	20.4	20.8	22.3	16.4
≥ 30 years	22.5	19.9	19.0	21.0	20.9	25.3	23.8	24.9	27.7	29.2	33.1
MARITAL STATUS:											
Unmarried	53.2	58.4	54.6	58.4	60.1	55.1	59.1	63.0	61.0	66.1	61.4
MOTHER'S EDUCATION:											
< 9 years	14.3	17.1	11.4	12.1	10.8	14.2	11.6	11.5	10.4	9.8	7.1
PRENATAL CARE BEGAN:											
1st trimester	46.8	45.1	53.1	52.3	46.3	50.0	53.5	49.4	47.6	43.8	48.7
3rd trimester	9.3	10.1	7.3	9.6	9.0	10.8	8.6	8.0	11.3	10.2	11.1
No care	11.1	14.0	16.8	11.0	10.1	8.2	8.9	11.5	9.2	9.9	10.6
PRENATAL VISITS:											
1-4	27.1	22.0	21.6	22.4	20.9	20.6	20.5	16.6	21.1	19.8	21.4
≥ 5	58.6	60.5	58.2	61.5	64.2	65.5	65.0	66.5	66.7	66.9	64.8
≥ 9	28.2	28.2	33.7	34.1	40.3	36.7	39.3	41.1	43.2	35.8	34.7
≥ 13	8.2	4.2	6.2	5.3	14.9	11.7	14.2	13.0	16.4	13.2	12.4
MEDICAL RISKS/ COMPLICATIONS:[1]	68.9	62.2	73.3	68.7	67.9	72.5	73.9	79.6	78.9	79.3	80.7
GESTATIONAL AGE:[2]											
< 38 weeks	42.9	45.5	39.9	46.3	56.7	53.5	67.7	66.9	61.6	74.4	74.6
BIRTH WEIGHT:											
≤ 1,500 grams	11.8	9.8	11.7	13.9	14.6	15.2	19.5	19.0	15.8	14.3	20.4
≤ 1,000 grams	5.4	2.1	5.5	4.6	5.6	7.0	8.3	9.2	6.0	7.4	12.2
CHILD'S SEX:											
Male	47.1	49.3	45.8	52.0	48.9	47.2	46.5	51.8	51.2	49.9	49.7
Female	52.9	50.7	54.2	48.0	51.1	52.8	53.5	48.2	48.8	50.1	50.3
PLURALITY:											
Multiple births	11.4	12.9	8.8	9.6	11.9	12.0	11.2	11.5	11.6	11.0	9.8
CAESAREAN DELIVERY:	22.5	19.6	32.2	27.4	26.5	30.7	31.4	28.7	28.0	27.3	29.9
PLACE OF DELIVERY:											
Hospital[3]	88.9	96.9	98.5	96.8	98.9	98.4	88.8	90.5	90.2	98.6	92.9
ATTENDANT AT BIRTH:											
Midwife[4]	15.7	12.6	8.4	6.8	9.7	14.9	15.8	13.9	15.2	16.0	13.0
PREVIOUS LIVE BIRTHS:											
1 or more	64.6	66.1	66.7	64.1	66.0	70.6	65.7	70.1	68.8	68.9	73.3

[1] Since 1989 these are reported medical risks for this pregnancy and/or complications of labor and delivery. For 1980-1988 data reported as complications of pregnancy, illnesses concurrent with pregnancy, and/or complications of labor/delivery.

[2] Gestational age is physician's estimate for 1980-1985 and since 1989. From 1986 to 1988 data on gestational age were computed from information on "date of birth" and "date of last normal menses."

[3] Hospital, clinic, medical center or maternity home.

[4] Licensed Midwife or Certified Nurse Midwife.

TABLE 1-18

SELECTED CHARACTERISTICS OF LIVE BIRTHS AND WOMEN GIVING BIRTH BY REGION AND ETHNICITY, ARIZONA, 1990

		AREA		MOTHER'S ETHNICITY				
CHARACTERISTICS	TOTAL	URBAN	RURAL	WHITE	HISPANIC	BLACK	NATIVE AMERICAN	OTHER
TOTAL	68,814	54,274	14,540	39,733	19,321	2,562	6,231	967
PAYEE FOR BIRTH								
AHCCCS	21,491	16,314	5,177	8,895	9,508	1,390	1,586	112
IHS	3,590	705	2,885	120	64	5	3,398	3
PRIVATE INSURANCE	32,797	28,540	4,257	24,903	5,836	874	483	701
SELF	8,280	7,034	1,246	4,547	3,229	231	164	109
UNKNOWN	2,656	1,681	975	1,268	684	62	600	42
MOTHER'S AGE								
<15	188	147	41	44	88	23	32	1
15-17	3,423	2,590	833	1,230	1,554	235	388	16
18-19	6,156	4,593	1,563	2,842	2,299	304	681	30
20-24	23,536	18,361	5,175	12,589	7,455	986	2,281	225
25-29	16,628	13,448	3,180	10,500	4,044	518	1,291	275
30-34	13,299	10,826	2,473	8,918	2,711	375	1,007	288
35-39	4,777	3,720	1,057	3,144	969	110	445	109
40-44	767	566	201	444	187	11	103	22
45+	23	12	11	13	7	0	3	0
UNKNOWN	17	11	6	9	7	0	0	1
MARITAL STATUS								
UNWED	22,436	16,917	5,519	8,336	8,704	1,569	3,732	95
WED	46,228	37,313	8,915	31,298	10,589	990	2,483	868
UNKNOWN	150	44	106	99	28	3	16	4
MOTHER'S EDUCATION								
NONE	327	276	51	185	101	3	22	16
1-8	5,390	4,474	916	767	4,134	62	384	43
9-12	37,969	28,530	9,439	19,895	11,641	1,581	4,471	381
13-16	20,877	17,547	3,330	16,006	2,655	744	1,116	356
17 +	2,902	2,566	336	2,479	219	55	27	122
UNKNOWN	1,349	881	468	401	571	117	211	49
PRENATAL CARE								
NO CARE	1,879	1,506	373	470	1,012	124	258	15
1ST TRIMESTER	45,533	37,411	8,122	30,556	9,835	1,528	2,888	726
2ND TRIMESTER	15,064	10,780	4,284	6,613	5,506	603	2,188	154
3RD TRIMESTER	4,984	3,469	1,515	1,675	2,293	197	779	40
UNKNOWN	1,354	1,108	246	419	675	110	118	32
ABNORMAL CONDITIONS OF THE NEWBORN*								
ANEMIA	122	91	31	67	36	6	13	0
BIRTH INJURY	69	44	25	49	10	5	3	2
FETAL ALCOHOL SYNDROME	21	7	14	4	4	1	12	0
MEMBRANE DISEASE	272	189	83	175	58	11	26	2
MECONIUM ASPIRATION	187	113	74	106	40	9	31	1
ASSISTED VENTILATION <30	669	343	326	448	130	31	57	3
ASSISTED VENTILATION >30	430	234	196	277	73	15	63	2
SEIZURES	47	33	14	25	13	2	6	1
OTHER	4,221	3,104	1,117	2,308	1,191	227	445	50
TOTAL	5,279	3,707	1,572	2,985	1,397	265	573	59
# PRENATAL VISITS								
NO VISITS	1,871	1,497	374	463	1,012	123	258	15
1-4 VISITS	4,909	3,332	1,577	1,534	2,134	298	908	35
5-8	12,591	8,990	3,601	5,564	4,523	5337	1,827	144
9+ VISITS	48,052	39,353	8,699	31,705	10,988	1,517	3,107	735
UNKNOWN	1,391	1,102	289	467	664	91	131	38

* Will not add to total births since more than one might be reported.

TABLE 1-18 (continued)

SELECTED CHARACTERISTICS OF LIVE BIRTHS AND WOMEN GIVING BIRTH BY REGION AND ETHNICITY, ARIZONA, 1990

		AREA		MOTHER'S ETHNICITY				
CHARACTERISTICS	TOTAL	URBAN	RURAL	WHITE	HISPANIC	BLACK	NATIVE AMERICAN	OTHER
LENGTH OF GESTATION								
20-37	9,184	7,251	1,933	5,286	2,460	478	814	146
38-42	59,175	46,686	12,489	34,256	16,681	2,058	5,364	816
43+	174	144	30	83	62	10	19	0
UNKNOWN	281	193	88	108	118	16	34	5
LBW								
<1500 GRAMS	876	708	168	483	231	75	77	10
1501-2499 GRAMS	3,575	2,747	828	1,989	1,006	220	301	59
TOTAL, <2,500 GRAMS	4,451	3,455	996	2,472	1,237	295	378	69
NEWBORN INTENSIVE CARE								
NO	65,229	51,951	13,278	37,764	18,574	2,400	5,573	918
YES	2,727	2,241	486	1,643	712	157	175	40
UNKNOWN	858	82	776	326	35	5	483	9
MEDICAL RISK FACTORS*								
ANEMIA	1,168	664	504	459	282	68	353	6
CARDIAC DISEASE	190	154	36	119	38	11	21	1
LUNG DISEASE	107	78	29	63	20	14	10	0
DIABETES	1,454	1,012	442	653	354	32	388	27
GENITAL HERPES	753	655	98	617	76	25	29	6
HYDRAMNIOS	337	225	112	182	72	15	65	3
HEMOGLOBINOPATHY	5	2	3	4	0	0	1	0
CHRONIC HYPERTENSION	399	262	137	248	68	15	66	2
PREGNANCY ASSOCIATED HYPERTENSION	1,761	1,192	569	917	416	69	349	10
ECLAMPSIA	408	265	143	222	102	11	70	3
PREVIOUS INFANT 4000+ GRAMS	367	163	204	189	63	4	107	4
PREVIOUS SGA INFANT	438	217	221	248	64	8	114	4
RENAL DISEASE	103	40	63	28	20	4	51	0
RH SENSITIZATION	409	211	198	375	25	3	4	2
UTERINE BLEEDING	301	196	105	200	53	7	38	3
OTHER	8,303	6,024	2,279	4,339	2,282	381	1,215	86
TOTAL	14,286	9,968	4,318	7,697	3,479	597	2,372	141
OTHER RISK FACTORS								
ALCOHOL USE	1,343	1,029	314	893	224	49	167	10
TOBACCO USE	9,019	7,242	1,777	7,244	1,156	411	161	47
BOTH	1,242	964	278	853	188	99	94	8
NONE	57,210	45,039	12,171	30,743	17,753	2,003	5,809	902
WEIGHT GAIN								
NONE	357	258	99	172	99	25	56	5
1-10	1,889	1,312	577	822	579	98	374	16
11-20 POUNDS	9,138	6,748	2,390	4,403	2,926	388	1,279	142
21 OR MORE	50,490	40,650	9,840	32,042	12,526	1,666	3,543	713
UNKNOWN	6,940	5,306	1,634	2,294	3,191	385	979	91
TOTAL	68,814	54,274	14,540	39,733	19,321	2,562	6,231	967
OBSTETRIC PROCEDURES*								
AMNIOCENTESIS	1,722	1,408	314	1,287	265	41	102	27
ELECTRO. FETAL MONIT.	46,709	36,259	10,450	27,704	11,859	1,678	4,788	680
INDUCTION OF LABOR	7,381	5,868	1,513	5,064	1,392	218	615	92
STIMULATION OF LABOR	8,778	6,853	1,925	5,378	2,182	376	721	121
TOCOLYSIS	627	385	242	421	104	20	78	4
ULTRASOUND	47,018	37,984	9,034	29,447	11,567	1,689	3,638	677
OTHER	8,814	8,199	615	5,265	2,596	354	481	118
TOTAL	61,284	48,156	13,128	36,632	16,059	2,174	5,526	893

* Will not add to total births since more than one might be reported.

TABLE 1-18 (continued)

SELECTED CHARACTERISTICS OF LIVE BIRTHS AND WOMEN GIVING BIRTH BY REGION AND ETHNICITY, ARIZONA, 1990

		AREA		MOTHER'S ETHNICITY				
CHARACTERISTICS	TOTAL	URBAN	RURAL	WHITE	HISPANIC	BLACK	NATIVE AMERICAN	OTHER
COMPLICATIONS OF LABOR/ DELIVERY*								
FEBRILE	766	663	103	421	227	24	81	13
MECONIUM	4,206	3,401	805	2,061	1,349	222	521	53
RUPTURE OF MEMBRANE	1,729	1,163	566	933	391	57	329	19
ABRUPTIO PLACENTA	349	250	99	226	65	12	41	5
PLACENTA PREVIA	179	128	51	120	33	2	21	3
OTHER BLEEDING	402	213	189	162	78	6	147	9
SEIZURES	31	24	7	20	7	0	4	0
PRECIPITOUS LABOR	700	466	234	389	162	38	102	9
PROLONGED LABOR	632	308	324	367	94	14	145	12
DYSFUNCTIONAL LABOR	1,235	774	461	617	335	55	212	16
BREECH MALPRESENTATION	2,478	1,947	531	1,597	592	73	183	33
CEPHALOPELVIC DISP.	1,674	1,281	393	1,069	426	53	98	28
CORD PROLAPSE	156	100	56	105	35	2	14	0
ANESTHETIC COMPLICATIONS	26	21	5	19	7	0	0	0
FETAL DISTRESS	2,490	1,934	556	1,523	603	116	222	26
OTHER	13,038	10,995	2,043	7,942	3,401	435	1,057	203
TOTAL	24,007	19,107	4,900	14,142	6,228	873	2,433	331
METHOD OF DELIVERY*								
VAGINAL	53,290	41,856	11,434	30,078	15,381	1,973	5,108	750
VAGINAL AFTER C-SECTION	1,666	1,213	453	919	393	52	284	18
PRIMARY C-SECTION	8,264	6,706	1,558	5,267	2,040	324	514	119
REPEAT C-SECTION	4,527	3,585	942	2,789	1,197	182	298	61
FORCEPS	3,168	2,703	465	2,071	859	94	89	55
VACUUM	2,914	2,498	416	1,810	894	90	63	57
CONGENITAL ANOMALIES*								
ANENCEPHALUS	9	8	1	5	4	0	0	0
SPINA BIFIDA	10	8	2	4	4	0	1	1
HYDROCEPHALUS	16	12	4	8	4	0	3	1
MICROCEPHALUS	3	2	1	2	1	0	0	0
OTHER CNS ANOMALY	6	4	2	3	2	0	1	0
HEART MALFORMATIONS	66	52	14	35	16	3	11	1
OTHER RESP./CIRCULATORY	80	59	21	48	19	6	7	0
RECTAL ATRESIA	6	4	2	6	0	0	0	0
FISTULA/ESOPH. ATRESIA	6	3	3	3	1	1	1	0
OMPHALOCELE	25	21	4	13	9	0	3	0
OTHER GASTROINTESTINAL	12	9	3	8	2	1	1	0
MALFORMED GENITALIA	22	16	6	9	10	1	2	0
RENAL AGENESIS	2	0	2	2	0	0	0	0
OTHER UROGENITAL	61	44	17	35	18	0	7	1
CLEFT LIP/PALATE	70	39	31	39	12	3	16	0
POLYDACTYLY	30	21	9	13	9	5	2	1
CLUB FOOT	39	31	8	23	9	3	4	0
DIAPHRAGMATIC HERNIA	16	11	5	9	3	2	2	0
OTHER MUSCULOSKELETAL	32	17	15	16	7	0	9	0
DOWN'S SYNDROME	41	28	13	20	12	0	8	1
OTHER CHROMOSOMAL	26	12	14	14	10	0	2	0
OTHER	557	364	193	286	137	25	101	8
UNSPECIFIED	84	34	50	28	31	4	17	4
TOTAL BIRTHS	1,088	719	369	572	277	50	171	18

* Will not add to total births since more than one might be reported.

TABLE 1-19

CHANGES FROM 1989 TO 1990 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH WHICH DIFFER BY AREA AND/OR ETHNICITY

	AREA				MATERNAL ETHNICITY[a]							
	URBAN		RURAL		W		H		B		NA	
CHARACTERISTICS	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
Births with Medical Risk Factors Reported	19.6	18.4	24.9	29.7	19.7	19.4	18.1	18.0	25.5	23.3	34.9	38.1
Births with Complications Reported	35.3	35.2	32.4	33.7	34.7	35.6	32.4	32.2	38.4	34.1	37.5	39.1
Primary and Repeat C-Sections	19.3	19.0	16.3	17.2	20.2	20.3	17.0	16.8	20.1	19.8	11.9	13.0
Births with Abnormal Conditions Reported	7.3	6.8	7.2	10.8	CONSISTENT INCREASES							
Newborn Intensive Care	4.1	4.1	3.1	3.3	3.9	4.1	3.6	3.7	6.8	6.1	2.8	2.8
Births with Congenital Anomalies Reported	1.9	1.3	2.1	2.5	1.9	1.4	2.0	1.4	2.8	2.0	2.1	2.7

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[a] W = White non-Hispanic; H = Hispanic; B = Black; NA = Native American

TABLE 1-20

PAYEE FOR THE DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 1990

		PAYEE FOR BIRTH				
CHARACTERISTICS:	TOTAL BIRTHS	AHCCCS*	IHS**	PRIVATE INSURANCE	SELF	UNKNOWN
TOTAL BIRTHS	68,814	21,491	3,590	32,797	8,280	2,656
MOTHER'S AGE						
<15	188	109	18	33	25	3
15-19	9,579	5,494	595	1,915	1,196	379
20-24	19,316	7,818	1,093	7,035	2,588	782
25-29	20,848	4,825	1,012	11,827	2,428	756
30-34	13,299	2,272	574	8,520	1,429	504
35-39	4,777	798	253	3,024	521	181
40-44	767	162	42	429	87	47
>44	27	10	3	10	2	2
UNKNOWN	13	3	0	4	4	2
MARITAL STATUS						
UNWED	22,436	12,938	2,062	3,985	2,480	971
WED	46,228	8,549	1,528	28,806	5,799	1,546
UNKNOWN	150	4	0	6	1	139
MOTHER'S EDUCATION						
NONE	327	75	14	182	45	11
1-8	5,390	2,983	207	720	1,237	243
9-12	37,969	15,134	2,576	14,113	4,621	1,525
13-16	20,877	2,526	635	14,976	2,037	703
17 +	2,902	78	23	2,502	208	91
UNKNOWN	1,349	695	135	304	132	83
PRENATAL CARE						
NO CARE	1,879	792	141	164	644	138
1ST TRIMESTER	45,533	9,901	1,638	27,691	4,910	1,393
2ND TRIMESTER	15,064	7,252	1,310	3,906	1,855	741
3RD TRIMESTER	4,984	2,869	433	780	604	298
UNKNOWN	1,354	677	68	256	267	86
# PRENATAL VISITS						
NO VISITS	1,871	785	142	159	646	139
1-4 VISITS	4,909	2,769	529	735	607	269
5-8 VISITS	12,591	5,605	1,068	3,792	1,422	704
9+ VISITS	48,052	11,664	1,795	27,845	5,311	1,437
UNKNOWN	1,391	668	56	266	294	107
ABNORMAL CONDITIONS OF THE NEWBORN***						
ANEMIA	122	38	10	53	17	4
BIRTH INJURY	69	24	2	37	5	1
FETAL ALCOHOL SYNDROME	21	5	9	2	1	4
MEMBRANE DISEASE	272	120	16	107	12	17
MECONIUM ASPIRATION	187	63	20	81	13	10
ASSISTED VENTILATION <30	669	247	26	266	120	10
ASSISTED VENTILATION >30	430	161	34	186	38	11
SEIZURES	47	15	5	16	11	0
OTHER	4,221	1,748	221	1,683	450	119
TOTAL	5,279	2,130	298	2,128	567	156
LENGTH OF GESTATION						
20-37	9,184	3,182	408	4,195	1,051	348
38-42	59,175	18,125	3,162	28,505	7,150	2,233
43+	174	79	8	45	35	7
UNKNOWN	281	105	12	52	44	68

* The Arizona Health Care Cost Containment System is the State's alternative to Medicaid.

** Indian Health Services.

*** Will not add to total births since more than one might be reported.

TABLE 1-20 (continued)

PAYEE FOR THE DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 1990

		PAYEE FOR BIRTH				
CHARACTERISTICS:	TOTAL BIRTHS	AHCCCS*	IHS**	PRIVATE INSURANCE	SELF	UNKNOWN
LBW						
<1500 GRAMS	876	334	35	366	110	31
1501-2499 GRAMS	3,575	1,415	137	1,483	397	143
TOTAL, <2,500 GRAMS	4,451	1,749	172	1,849	507	174
NEWBORN INTENSIVE CARE						
NO	65,229	20,510	3,509	31,521	7,967	1,722
YES	2,727	981	81	1,275	313	77
UNKNOWN	858	0	0	1	0	857
TOTAL	68,814	21,491	3,590	32,797	8,280	2,656
MEDICAL RISK FACTORS***						
ANEMIA	1,168	443	229	327	92	77
CARDIAC DISEASE	190	66	20	80	21	3
LUNG DISEASE	107	54	7	38	2	6
DIABETES	1,454	382	219	643	119	91
GENITAL HERPES	753	185	13	489	56	10
HYDRAMNIOS	337	118	40	137	30	12
HEMOGLOBINOPATHY	5	1	1	2	1	0
CHRONIC HYPERTENSION	399	116	37	200	29	17
PREGNANCY ASSOCIATED HYPERTENSION	1,761	479	215	857	132	78
ECLAMPSIA	408	151	37	180	34	6
PREVIOUS INFANT 4000+ GRAMS	367	89	79	144	34	21
PREVIOUS SGA INFANT	438	125	88	169	41	15
RENAL DISEASE	103	50	37	14	1	1
RH SENSITIZATION	409	116	1	234	48	10
UTERINE BLEEDING	301	87	21	152	27	14
OTHER	8,303	3,328	780	3,025	751	419
TOTAL	14,286	5,027	1,483	5,302	1,284	690
OTHER RISK FACTORS						
ALCOHOL USE	1,343	303	87	794	130	29
TOBACCO USE	9,019	4,466	79	3,139	1,139	196
BOTH	1,242	597	61	422	133	29
NONE	57,210	16,125	3,363	28,442	6,878	2,402
WEIGHT GAIN						
NONE	357	157	29	140	20	11
1-10 POUNDS	1,889	690	223	682	214	80
11-20 POUNDS	9,138	3,109	786	3,796	1,066	381
21 OR MORE	50,490	14,535	2,015	26,617	5,719	1,604
UNKNOWN	6,940	3,000	537	1,562	1,261	580
TOTAL	68,814	21,491	3,590	32,797	8,280	2,656
OBSTETRIC PROCEDURES***						
AMNIOCENTESIS	1,722	298	60	1,174	130	60
ELECTRO. FETAL MONIT.	46,709	13,920	2,933	24,185	3,914	1,757
INDUCTION OF LABOR	7,381	1,966	348	4,352	537	178
STIMULATION OF LABOR	8,778	2,922	348	4,793	576	139
TOCOLYSIS	627	199	47	306	45	30
ULTRASOUND	47,018	13,773	2,106	25,406	4,391	1,342
OTHER	8,814	3,000	258	4,391	958	207
TOTAL	61,284	18,451	3,305	31,302	6,164	2,062

* The Arizona Health Care Cost Containment System is the State's alternative to Medicaid.

** Indian Health Services.

*** Will not add to total births since more than one might be reported.

TABLE 1-20 (continued)

PAYEE FOR THE DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 1990

CHARACTERISTICS:	TOTAL BIRTHS	PAYEE FOR BIRTH				
		AHCCCS*	IHS**	PRIVATE INSURANCE	SELF	UNKNOWN
COMPLICATIONS OF LABOR/ DELIVERY***						
FEBRILE	766	241	60	389	69	7
MECONIUM	4,206	1,574	330	1,778	415	109
RUPTURE OF MEMBRANE	1,729	498	209	807	140	75
ABRUPTIO PLACENTA	349	112	32	162	33	10
PLACENTA PREVIA	179	48	10	94	17	10
OTHER BLEEDING	402	107	107	136	25	27
SEIZURES	31	14	2	10	3	2
PRECIPITOUS LABOR	700	241	64	291	75	29
PROLONGED LABOR	632	154	98	272	76	32
DYSFUNCTIONAL LABOR	1,235	443	143	508	85	56
BREECH MALPRESENTATION	2,478	743	91	1,359	201	84
CEPHALOPELVIC DISP.	1,674	417	38	1,016	142	61
CORD PROLAPSE	156	45	3	80	17	11
ANESTHETIC COMPLICATIONS	26	6	1	15	4	0
FETAL DISTRESS	2,490	771	142	1,243	266	68
OTHER	13,038	4,051	580	6,745	1,173	489
TOTAL	24,007	7,435	1,445	11,972	2,276	879
METHOD OF DELIVERY***						
VAGINAL	53,290	17,090	3,005	24,267	6,783	2,145
VAGINAL AFTER C-SECTION	1,666	450	194	814	138	70
PRIMARY C-SECTION	8,264	2,347	243	4,644	792	238
REPEAT C-SECTION	4,527	1,349	143	2,533	374	128
FORCEPS	3,168	946	40	1,632	469	81
VACUUM	2,914	886	19	1,586	344	79
TOTAL	68,686	21,470	3,587	32,761	8,272	2,596
CONGENITAL ANOMALIES						
ANENCEPHALUS	9	2	0	6	1	0
SPINA BIFIDA	10	4	0	3	1	2
HYDROCEPHALUS	16	6	0	9	0	1
MICROCEPHALUS	3	0	0	2	0	1
OTHER CNS ANOMALY	6	3	0	2	1	0
HEART MALFORMATIONS	66	29	4	28	1	4
OTHER RESP./CIRCULATORY	80	35	1	24	15	5
RECTAL ATRESIA	6	2	0	4	0	0
FISTULA/ESOPH. ATRESIA	6	3	0	2	1	0
OMPHALOCELE	25	5	2	17	1	0
OTHER GASTROINTESTINAL	12	2	0	6	2	2
MALFORMED GENITALIA	22	9	1	10	1	1
RENAL AGENESIS	2	2	0	0	0	0
OTHER UROGENITAL	61	24	1	28	4	4
CLEFT LIP/PALATE	70	21	6	30	7	6
POLYDACTYLY	30	13	0	12	3	2
CLUB FOOT	39	16	1	19	3	0
DIAPHRAGMATIC HERNIA	16	6	0	7	3	0
OTHER MUSCULOSKELETAL	32	6	4	18	1	3
DOWN'S SYNDROME	41	10	4	18	6	3
OTHER CHROMOSOMAL	26	11	1	11	2	1
OTHER	557	192	65	206	63	31
UNSPECIFIED	84	15	1	3	7	58
TOTAL	1,088	364	85	409	115	115

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* The Arizona Health Care Cost Containment System is the State's alternative to Medicaid.

** Indian Health Services.

*** Will not add to total births since more than one might be reported.

TABLE 1-21

CHANGES FROM 1989 TO 1990 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH WHICH DIFFER BY PAYEE FOR THE DELIVERY

	PAYEE									
	AHCCCS*		IHS**		PHI***		SELF		UNKNOWN	
CHARACTERISTIC	1989	1990	1989	1990	1989	1990	1989	1990	1989	1990
Teenage mother[a]	25.8	26.1	17.3	17.1	7.0	5.9	15.2	14.8	14.6	14.4
Single mother	59.7	60.2	55.7	57.4	13.0	12.2	29.2	30.0	30.2	36.6
Early prenatal care[b]	42.0	46.1	46.8	45.6	81.0	84.4	56.0	59.3	58.1	52.4
0 - 4 prenatal visits	19.7	16.5	18.1	18.7	3.5	2.7	18.0	15.1	16.3	15.4
Births with risk factors reported	24.2	23.4	37.0	41.3	18.4	17.7	16.2	15.5	20.9	26.0
No obstetric procedures	16.8	14.1	11.8	7.9	9.2	4.4	24.4	25.5	29.8	20.6
Births with complications reported	37.0	34.6	38.2	40.3	35.0	36.5	28.8	27.5	27.8	33.9
Primary and repeat C-Section	17.2	17.2	10.6	10.7	21.5	21.9	12.7	14.1	14.2	14.1
Births with abnormal conditions reported	10.4	9.9	6.6	8.3	6.1	6.5	5.6	6.8	7.3	5.9
LBW rate	7.8	8.1	5.1	4.8	5.8	5.6	6.0	6.1	7.3	6.6
Newborn intensive care	4.3	4.6	2.2	2.3	3.9	3.9	3.3	3.8	4.1	2.9
Births with congenital anomalies reported	2.6	1.7	1.9	2.4	1.6	1.2	1.7	1.4	2.9	4.3

* The Arizona Health Care Cost Containment System is the state's Medicaid program.

** Indian Health Service.

*** Private Health Insurance.

[a] Less than 20 years old.

[b] Entered care in first trimester of pregnancy.

TABLE 1-22

SELECTED CHARACTERISTICS OF LOW-BIRTHWEIGHT OR PREMATURE BIRTHS ARIZONA, 1990

		BIRTHWEIGHT		LENGTH OF GESTATION	
CHARACTERISTICS	TOTAL	LBW	NON-LBW	PRETERM	NOT PRETERM
TOTAL	68,814	4,451	64,363	9,184	59,630
AGE GROUP OF MOTHER					
<15	188	20	168	47	141
15-19	9,579	788	8,791	1,480	8,099
20-24	19,316	1,167	18,149	2,466	16,850
25-29	20,848	1,167	19,681	2,507	18,341
30-34	13,299	877	12,422	1,814	11,485
35-39	4,777	357	4,420	751	4,026
40-44	767	69	698	109	658
45+	27	5	22	9	18
UNKNOWN	13	1	12	1	12
MARITAL STATUS					
UNWED	22,436	1,840	20,596	3,413	19,023
WED	46,228	2,602	43,626	5,759	40,469
UNKNOWN	150	9	141	12	138
PRENATAL CARE					
NO CARE	1,879	267	1,612	470	1,409
1ST TRIMESTER	45,533	2,780	42,753	5,897	39,636
2ND TRIMESTER	15,064	1,007	14,057	1,976	13,088
3RD TRIMESTER	4,984	285	4,699	632	4,352
UNKNOWN	1,354	112	1,242	209	1,145
NUMBER OF PRENATAL VISITS					
NO VISITS	1,871	265	1,606	469	1,402
1-4 VISITS	4,909	580	4,329	999	3,910
5-8 VISITS	12,591	1,051	11,540	1,951	10,640
9-12 VISITS	28,156	1,418	26,738	3,334	24,822
13+ VISITS	19,896	1,002	18,894	2,210	17,686
UNKNOWN	1,391	135	1,256	221	1,170
PLURALITY					
SINGLE	66,383	3,602	62,781	8,017	58,366
PLURAL	1,568	805	763	1,066	502
UNKNOWN	863	44	819	101	762
PAYEE FOR BIRTH					
AHCCCS	21,491	1,749	19,742	3,182	18,309
IHS	3,590	172	3,418	408	3,182
PRIVATE INSURANCE	32,797	1,849	30,948	4,195	28,602
SELF	8,280	507	7,773	1,051	7,229
UNKNOWN	2,656	174	2,482	348	2,308
ETHNICITY OF MOTHER					
WHITE	39,733	2,472	37,261	5,286	34,447
HISPANIC	19,321	1,237	18,084	2,460	16,861
BLACK	2,562	295	2,267	478	2,084
NATIVE AMERICAN	6,231	378	5,853	814	5,417
OTHER	967	69	898	146	821
SUBSTANCE USE					
ALCOHOL USE	1,343	75	1,268	172	1,171
TOBACCO USE	9,019	910	8,109	1,470	7,549
BOTH	1,242	155	1,087	204	1,038
NONE	57,210	3,311	53,899	7,338	49,872

Note: Records with unspecified birthweight are included in non-LBW group.
Records with unspecified gestation are included in non-preterm group.

TABLE 1-22 (continued)

SELECTED CHARACTERISTICS OF LOW-BIRTHWEIGHT OR PREMATURE BIRTHS ARIZONA, 1990

		BIRTHWEIGHT		LENGTH OF GESTATION	
CHARACTERISTICS	TOTAL	LBW	NON-LBW	PRETERM	NOT PRETERM
WEIGHT GAIN					
NONE	357	72	285	95	262
1-10 POUNDS	1,889	284	1,605	427	1,462
11-20 POUNDS	9,138	982	8,156	1,666	7,472
21 OR MORE	50,490	2,433	48,057	5,855	44,635
UNKNOWN	6,940	680	6,260	1,141	5,799
CONGENITAL ANOMALIES					
NONE	67,726	4,229	63,497	8,883	58,843
ONE OR MORE	1,088	222	866	301	787
COMPLICATIONS OF LABOR/ DELIVERY*					
FEBRILE	766	55	711	114	652
MECONIUM	4,206	151	4,055	216	3,990
RUPTURE OF MEMBRANE	1,729	418	1,311	667	1,062
ABRUPTIO PLACENTA	349	125	224	170	179
PLACENTA PREVIA	179	51	128	98	81
OTHER BLEEDING	402	48	354	87	315
SEIZURES	31	6	25	10	21
PRECIPITOUS LABOR	700	48	652	110	590
PROLONGED LABOR	632	21	611	55	577
DYSFUNCTIONAL LABOR	1,235	38	1,197	109	1,126
BREECH MALPRESENTATION	2,478	551	1,927	818	1,660
CEPHALOPELVIC DISP.	1,674	34	1,640	84	1,590
CORD PROLAPSE	156	26	130	31	125
ANESTHETIC COMPLICATIONS	26	2	24	3	23
FETAL DISTRESS	2,490	299	2,191	385	2,105
OTHER	13,038	1,257	11,781	2,165	10,873
MEDICAL RISK FACTORS*					
ANEMIA	1,168	67	1,101	163	1,005
CARDIAC DISEASE	190	16	174	41	149
LUNG DISEASE	107	7	100	20	87
DIABETES	1,454	110	1,344	346	1,108
GENITAL HERPES	753	40	713	100	653
HYDRAMNIOS	337	108	229	133	204
HEMOGLOBINOPATHY	5	0	5	1	4
CHRONIC HYPERTENSION	399	78	321	129	270
PREGNANCY ASSOCIATED HYPERTENSION	1,761	294	1,467	485	1,276
ECLAMPSIA	408	98	310	148	260
PREVIOUS INFANT 4000+G	367	7	360	23	344
PREVIOUS SGA INFANT	438	89	349	156	282
RENAL DISEASE	103	6	97	18	85
RH SENSITIZATION	409	20	389	61	348
UTERINE BLEEDING	301	50	251	88	213
OTHER	8,303	989	7,314	1,827	6,476
METHOD OF DELIVERY*					
VAGINAL	53,290	2,910	50,380	6,444	46,846
VAGINAL AFTER C-SECTION	1,666	77	1,589	172	1,494
PRIMARY C-SECTION	8,264	1,160	7,104	1,758	6,506
REPEAT C-SECTION	4,527	263	4,264	712	3,815
FORCEPS	3,168	135	3,033	356	2,812
VACUUM	2,914	118	2,796	284	2,630

Note: Records with unspecified birthweight are included in non-LBW group.
Records with unspecified gestation are included in non-preterm group.

TABLE 1-23

SELECTED CHARACTERISTICS OF LOW-BIRTHWEIGHT AND PREMATURE BIRTHS
ARIZONA, 1990

	LENGTH OF GESTATION					
	PRETERM			NOT PRETERM		
		BIRTHWEIGHT			BIRTHWEIGHT	
CHARACTERISTICS	TOTAL	LBW	NON-LBW	TOTAL	LBW	NON-LBW
TOTAL	9,184	3,286	5,898	59,630	1,165	58,465
AGE GROUP OF MOTHER						
<15	47	19	28	141	1	140
15-19	1,480	599	881	8,099	189	7,910
20-24	2,466	827	1,639	16,850	340	16,510
25-29	2,507	859	1,648	18,341	308	18,033
30-34	1,814	660	1,154	11,485	217	11,268
35-39	751	266	485	4,026	91	3,935
40-44	109	52	57	658	17	641
45+	9	4	5	18	1	17
UNKNOWN	1	0	1	12	1	11
MARITAL STATUS						
UNWED	3,413	1,329	2,084	19,023	511	18,512
WED	5,759	1,953	3,806	40,469	649	39,820
UNKNOWN	12	4	8	138	5	133
PRENATAL CARE						
NO CARE	470	204	266	1,409	63	1,346
1ST TRIMESTER	5,897	2,119	3,778	39,636	661	38,975
2ND TRIMESTER	1,976	715	1,261	13,088	292	12,796
3RD TRIMESTER	632	175	457	4,352	110	4,242
UNKNOWN	209	73	136	1,145	39	1,106
NUMBER OF PRENATAL VISITS						
NO VISITS	469	204	265	1,402	61	1,341
1-4 VISITS	999	462	537	3,910	118	3,792
5-8 VISITS	1,951	776	1,175	10,640	275	10,365
9-12 VISITS	3,334	1,010	2,324	24,822	408	24,414
13+ VISITS	2,210	739	1,471	17,686	263	17,423
UNKNOWN	221	95	126	1,170	40	1,130
PLURALITY						
SINGLE	8,017	2,545	5,472	58,366	1,057	57,309
PLURAL	1,066	707	359	502	98	404
UNKNOWN	101	34	67	762	10	752
PAYEE FOR BIRTH						
AHCCCS	3,182	1,261	1,921	18,309	488	17,821
IHS	408	123	285	3,182	49	3,133
PRIVATE INSURANCE	4,195	1,409	2,786	28,602	440	28,162
SELF	1,051	367	684	7,229	140	7,089
UNKNOWN	348	126	222	2,308	48	2,260
ETHNICITY OF MOTHER						
WHITE	5,286	1,848	3,438	34,447	624	33,823
HISPANIC	2,460	875	1,585	16,861	362	16,499
BLACK	478	226	252	2,084	69	2,015
NATIVE AMERICAN	814	282	532	5,417	96	5,321
OTHER	146	55	91	821	14	807
SUBSTANCE USE						
ALCOHOL USE	172	49	123	1,171	26	1,145
TOBACCO USE	1,470	633	837	7,549	277	7,272
BOTH	204	106	98	1,038	49	989
NONE	7,338	2,498	4,840	49,872	813	49,059

Note: Records with unspecified birthweight are included in non-LBW group.
Records with unspecified gestation are included in non-preterm group.

TABLE 1-23 (continued)

SELECTED CHARACTERISTICS OF LOW-BIRTHWEIGHT AND PREMATURE BIRTHS
ARIZONA, 1990

	LENGTH OF GESTATION					
	PRETERM			NOT PRETERM		
		BIRTHWEIGHT			BIRTHWEIGHT	
CHARACTERISTICS	TOTAL	LBW	NON-LBW	TOTAL	LBW	NON-LBW
WEIGHT GAIN						
NONE	95	52	43	262	20	242
1-10 POUNDS	427	237	190	1,462	47	1,415
11-20 POUNDS	1,666	763	903	7,472	219	7,253
21 OR MORE	5,855	1,742	4,113	44,635	691	43,944
UNKNOWN	1,141	492	649	5,799	188	5,611
CONGENITAL ANOMALIES						
NONE	8,883	3,120	5,763	58,843	1,109	57,734
ONE OR MORE	301	166	135	787	56	731
COMPLICATIONS OF LABOR/ DELIVERY*						
FEBRILE	114	46	68	652	9	643
MECONIUM	216	65	151	3,990	86	3,904
RUPTURE OF MEMBRANE	667	390	277	1,062	28	1,034
ABRUPTIO PLACENTA	170	115	55	179	10	169
PLACENTA PREVIA	98	48	50	81	3	78
OTHER BLEEDING	87	40	47	315	8	307
SEIZURES	10	6	4	21	0	21
PRECIPITOUS LABOR	110	33	77	590	15	575
PROLONGED LABOR	55	10	45	577	11	566
DYSFUNCTIONAL LABOR	109	24	85	1,126	14	1,112
BREECH MALPRESENTATION	818	474	344	1,660	77	1,583
CEPHALOPELVIC DISP.	84	20	64	1,590	14	1,576
CORD PROLAPSE	31	20	11	125	6	119
ANESTHETIC COMPLICATIONS	3	2	1	23	0	23
FETAL DISTRESS	385	215	170	2,105	84	2,021
OTHER	2,165	1,022	1,143	10,873	235	10,638
MEDICAL RISK FACTORS*						
ANEMIA	163	56	107	1,005	11	994
CARDIAC DISEASE	41	14	27	149	2	147
LUNG DISEASE	20	6	14	87	1	86
DIABETES	346	88	258	1,108	22	1,086
GENITAL HERPES	100	29	71	653	11	642
HYDRAMNIOS	133	84	49	204	24	180
HEMOGLOBINOPATHY	1	0	1	4	0	4
CHRONIC HYPERTENSION	129	62	67	270	16	254
PREGNANCY ASSOCIATED HYPERTENSION	485	248	237	1,276	46	1,230
ECLAMPSIA	148	77	71	260	21	239
PREVIOUS INFANT 4000+G	23	4	19	344	3	341
PREVIOUS SGA INFANT	156	67	89	282	22	260
RENAL DISEASE	18	6	12	85	0	85
RH SENSITIZATION	61	15	46	348	5	343
UTERINE BLEEDING	88	44	44	213	6	207
OTHER	1,827	788	1,039	6,476	201	6,275
METHOD OF DELIVERY*						
VAGINAL	6,444	2,043	4,401	46,846	867	45,979
VAGINAL AFTER C-SECTION	172	54	118	1,494	23	1,471
PRIMARY C-SECTION	1,758	978	780	6,506	182	6,324
REPEAT C-SECTION	712	184	528	3,815	79	3,736
FORCEPS	356	98	258	2,812	37	2,775
VACUUM	284	77	207	2,630	41	2,589

Note: Records with unspecified birthweight are included in non-LBW group.
Records with unspecified gestation are included in non-preterm group.

FIGURE 1.

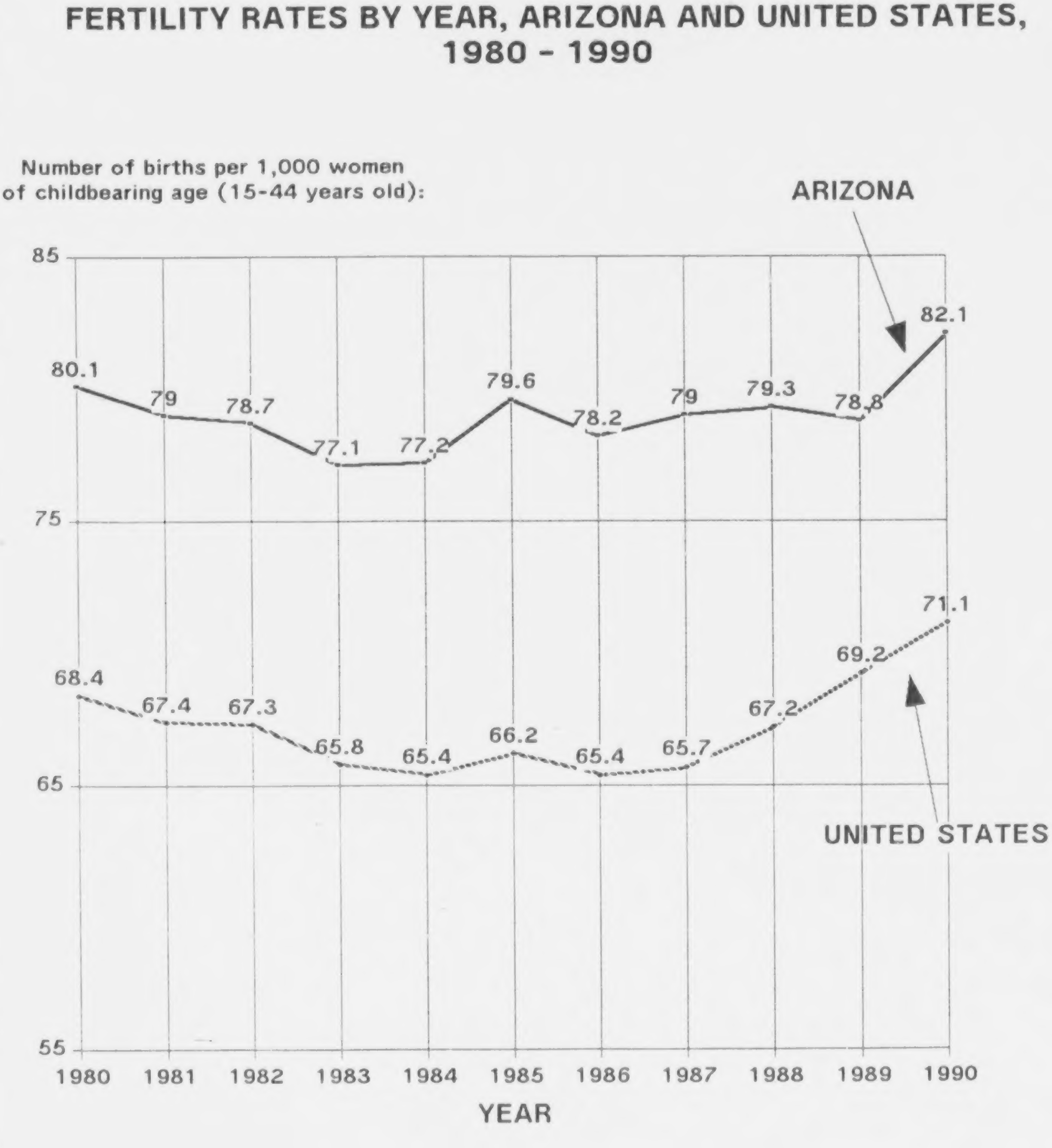
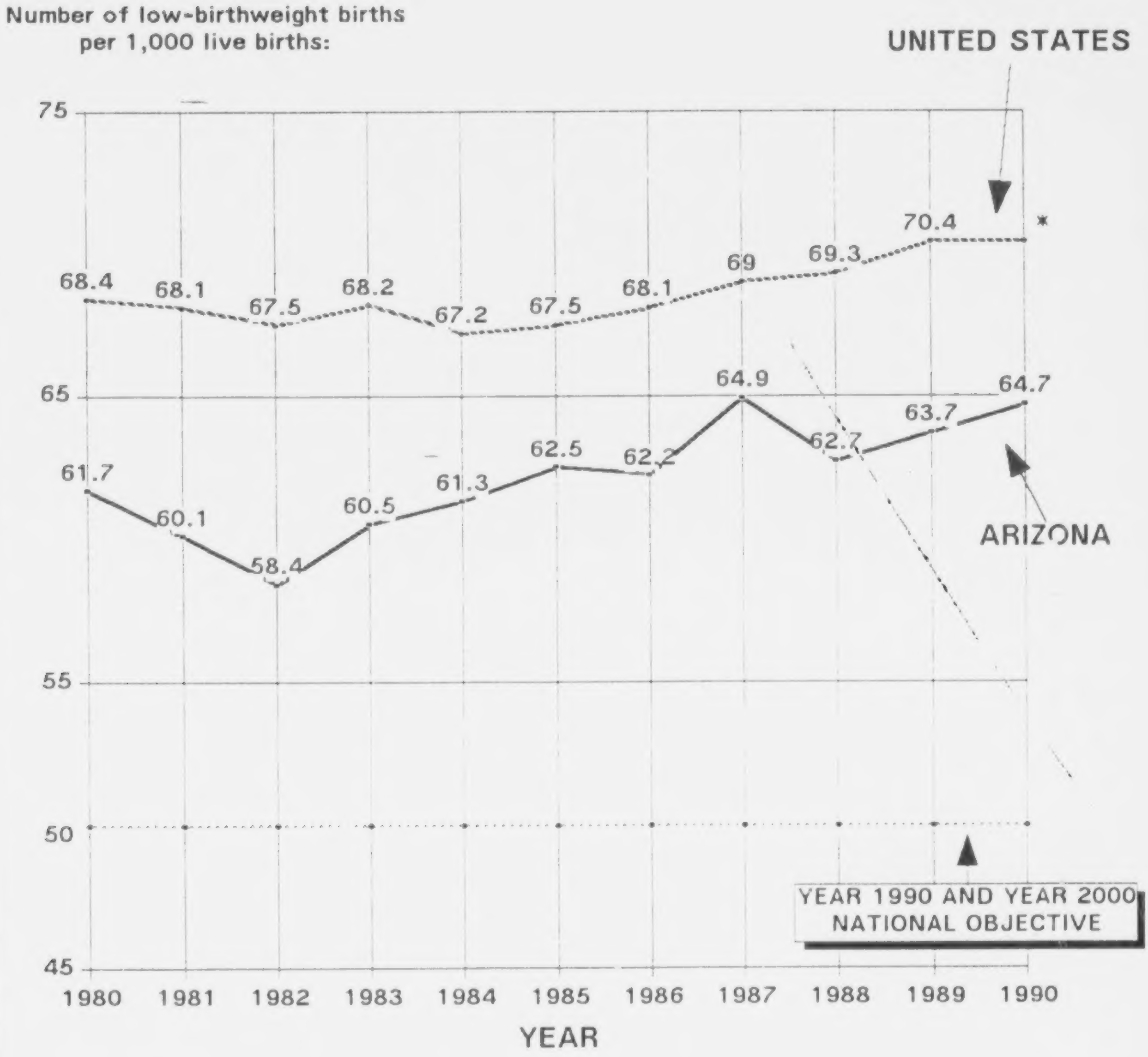

FERTILITY RATES BY YEAR, ARIZONA AND UNITED STATES, 1980 - 1990
Number of births per 1,000 women of childbearing age (15-44 years old):
ARIZONA
UNITED STATES
85
75
65
55
80.1
79
78.7
77.1
77.2
79.6
78.2
79
79.3
78.8
82.1
68.4
67.4
67.3
65.8
65.4
66.2
65.4
65.7
67.2
69.2
71.1
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
YEAR

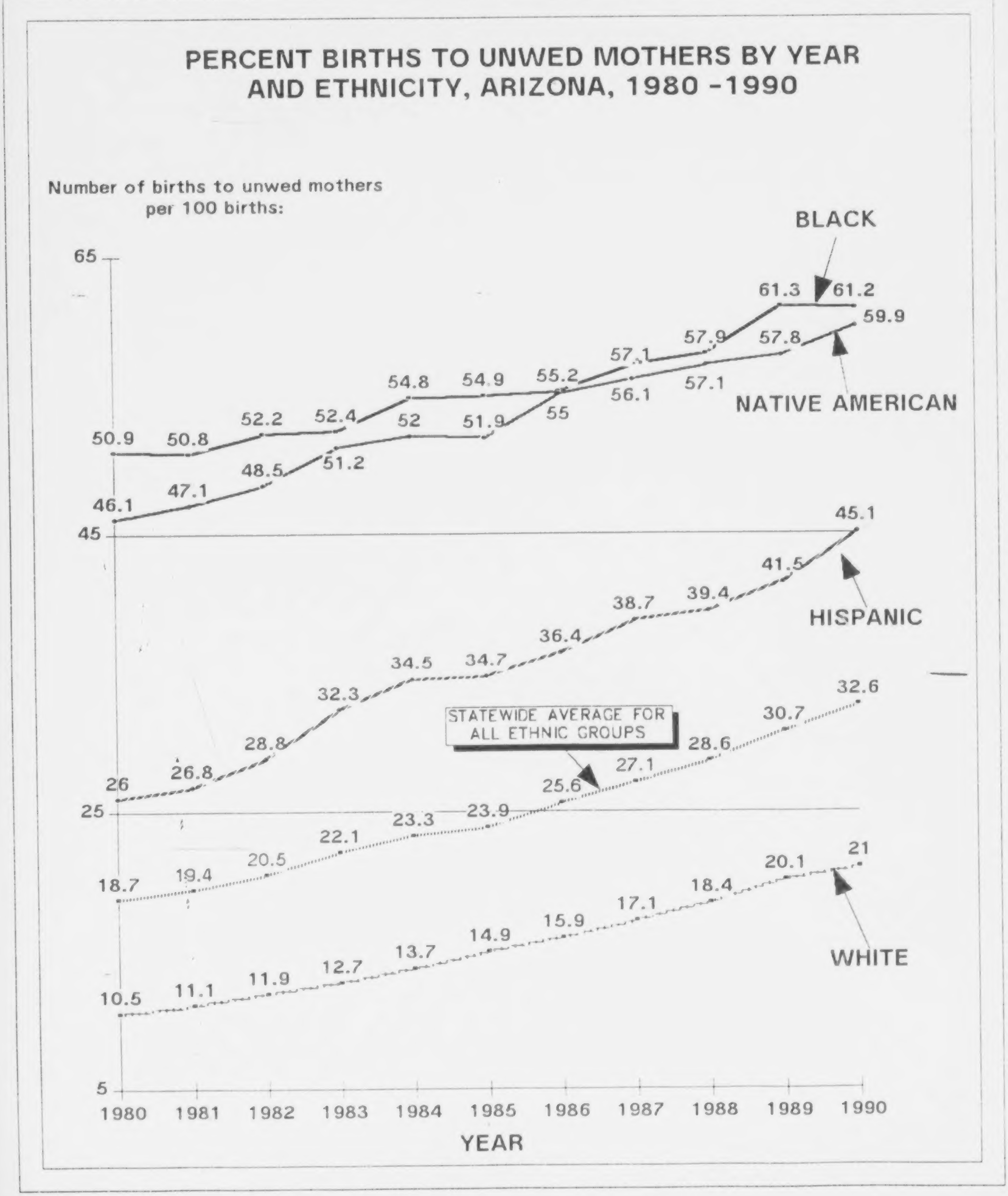
FIGURE 2.

LOW-BIRTHWEIGHT BIRTH RATIOS, ARIZONA AND UNITED STATES, 1980-1990 AND NATIONAL HEALTH OBJECTIVES FOR YEAR 1990 AND YEAR 2000



*The U.S. ratio not available for 1990.

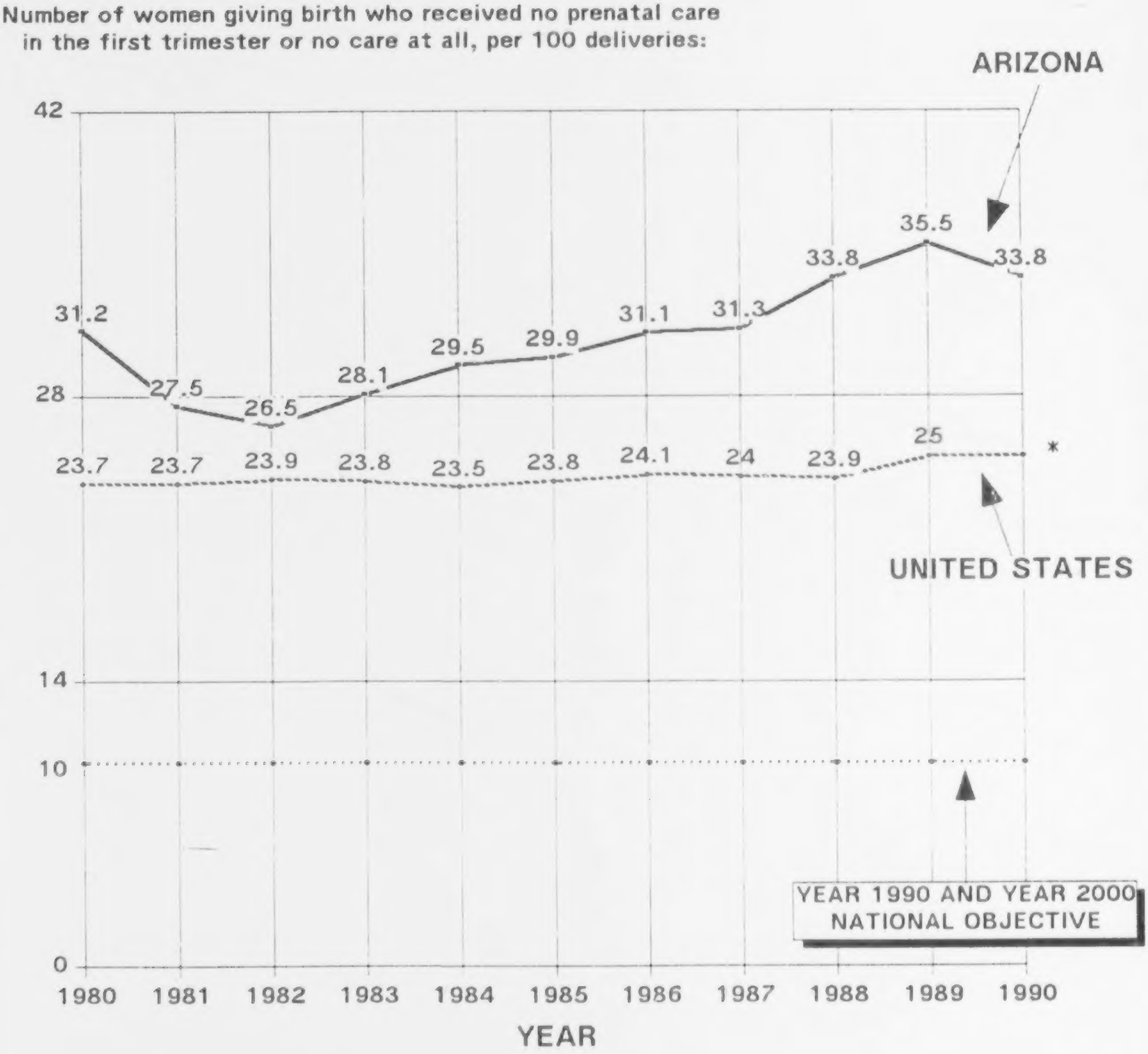
FIGURE 3.



PERCENT BIRTHS TO UNWED MOTHERS BY YEAR AND ETHNICITY, ARIZONA, 1980 -1990

FIGURE 4.

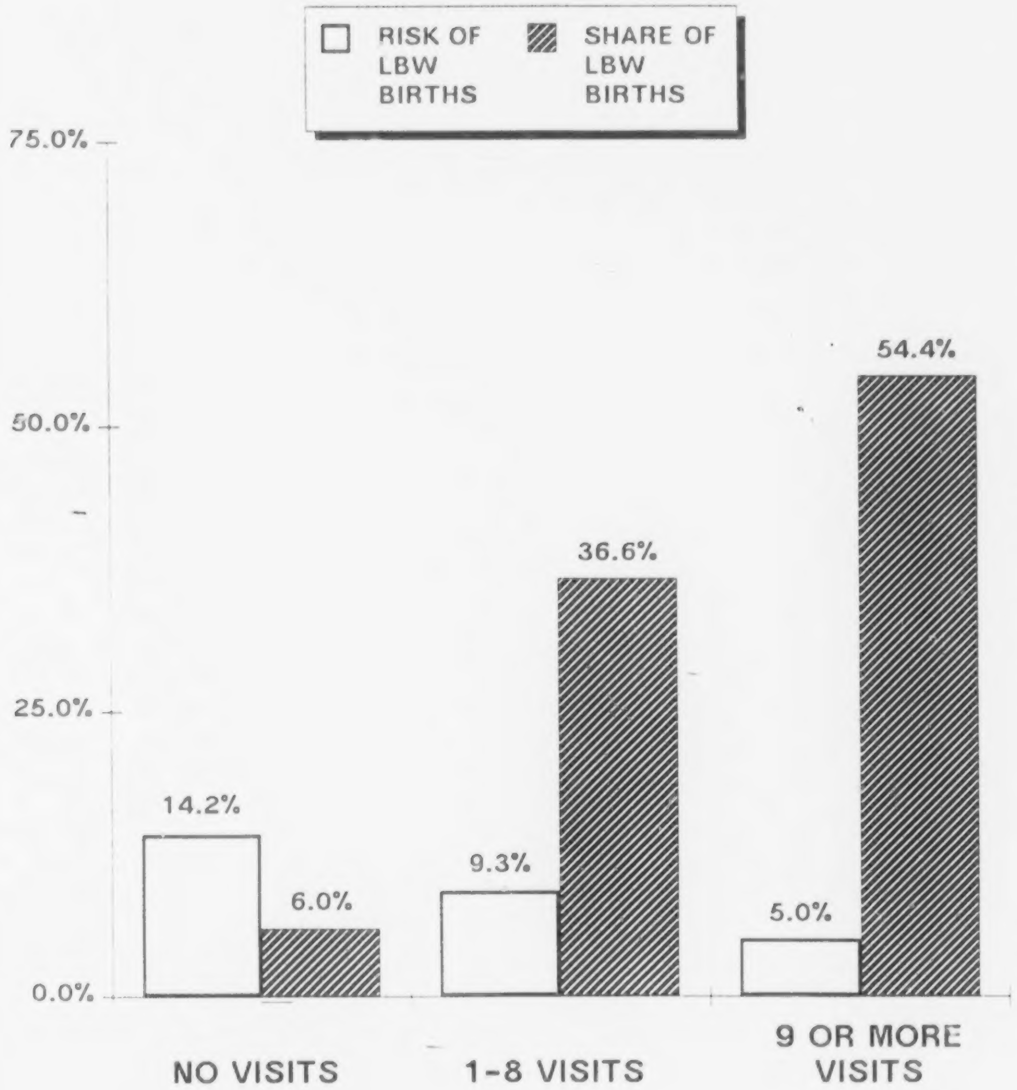
PERCENT PREGNANT WOMEN RECEIVING LATE OR NO PRENATAL CARE, ARIZONA AND UNITED STATES, 1980-1990 AND NATIONAL HEALTH OBJECTIVES FOR YEAR 1990 AND YEAR 2000



*The U.S. ratio not available for 1990.

FIGURE 5.

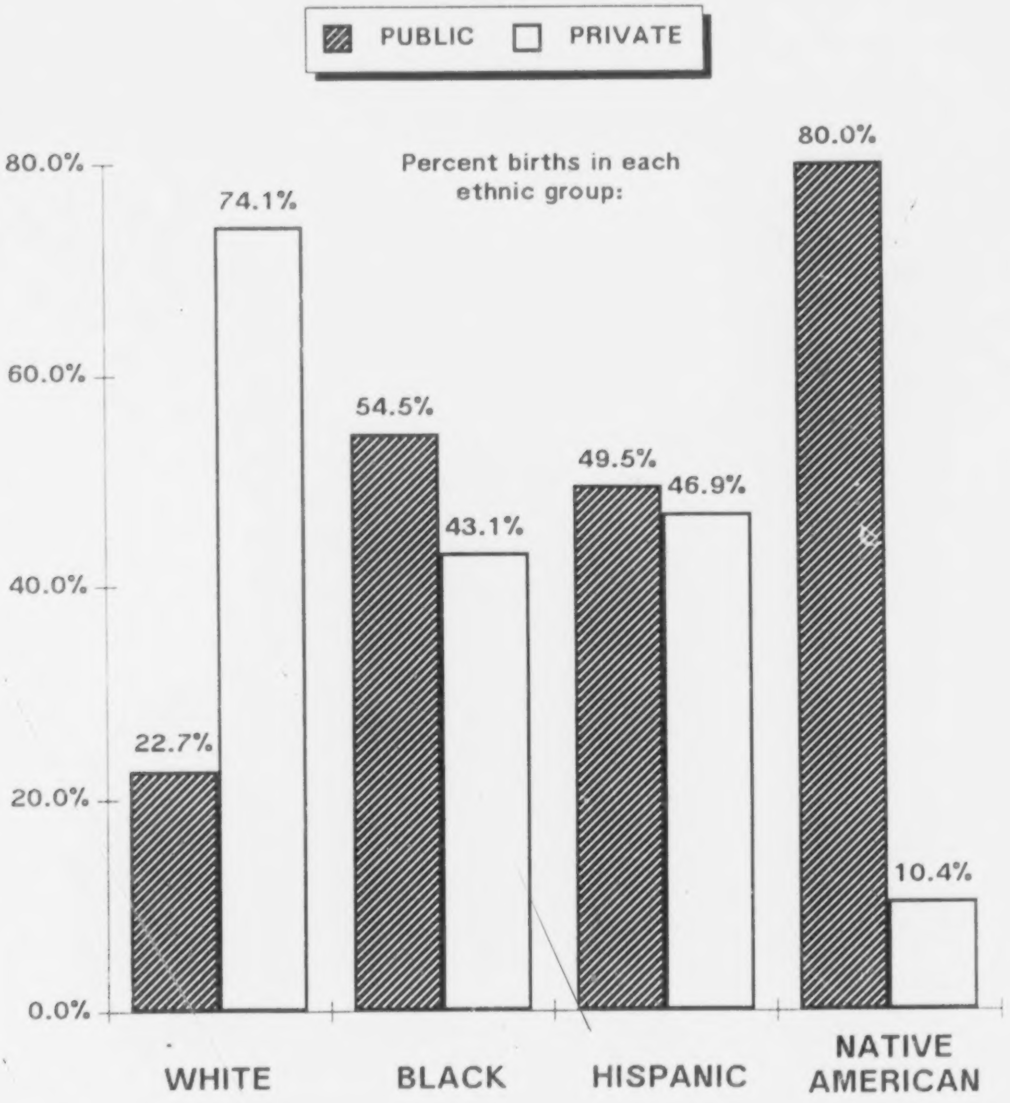
BIRTH RATIOS*OF LBW BABIES AND SHARE OF LBW BIRTHS** BY AMOUNT OF PRENATAL VISITS, ARIZONA, 1990



*Percent of total births being LBW births.
**Percent of all LBW babies born.

FIGURE 6.

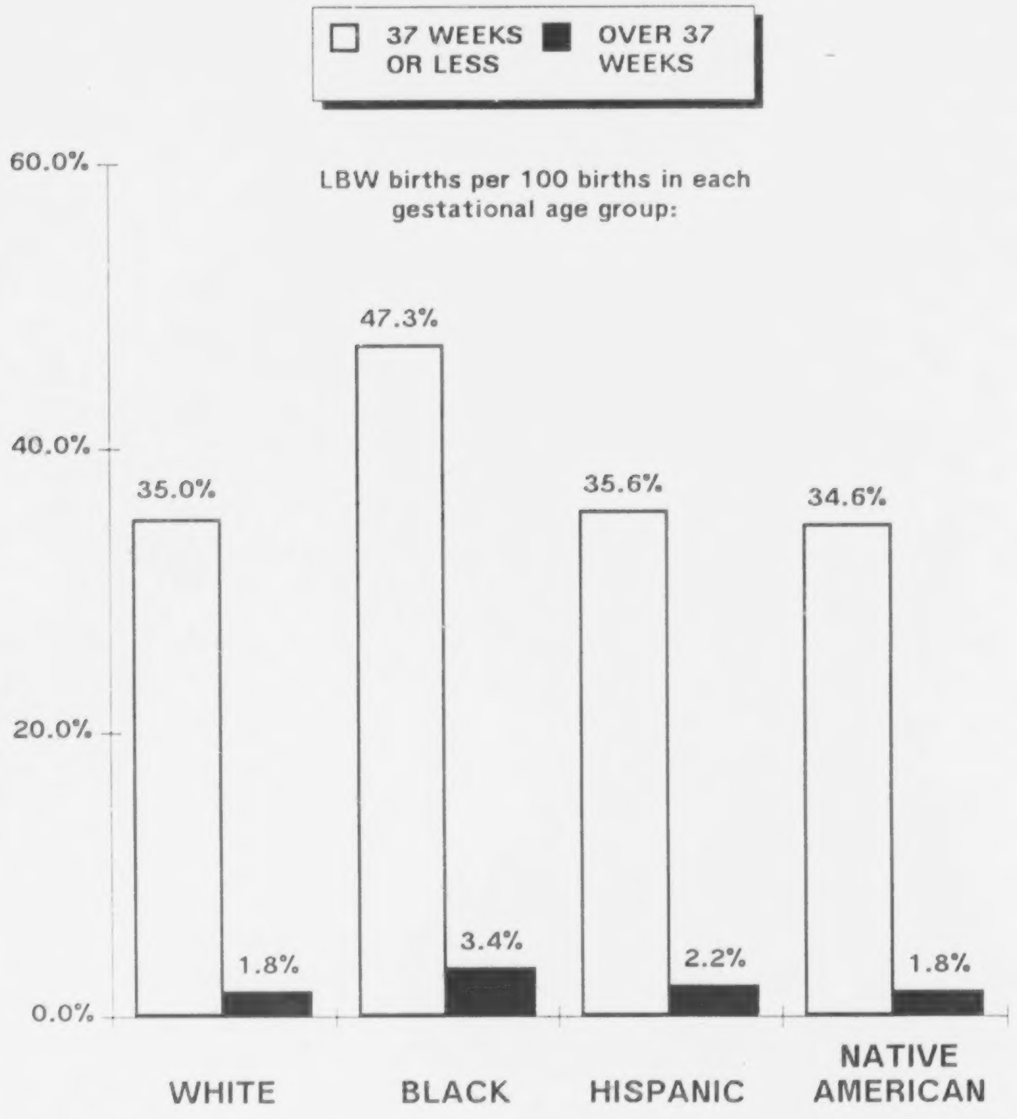
PUBLIC*AND PRIVATE**SOURCES OF PAYMENT FOR BIRTH BY ETHNICITY,ARIZONA,1990



*The Arizona Health Care Cost Containment System and/or the Indian Health Service.

**Private insurance or self pay.

FIGURE 7.



RISK OF LOW-BIRTHWEIGHT BIRTHS BY LENGTH OF GESTATION AND MOTHER'S ETHNIC GROUP, ARIZONA, 1990

TOTAL MORTALITY

TOTAL MORTALITY

The number of Arizona residents who died increased from 21,226 in 1980 to 28,471 in 1990. The 34 percent growth in the number of deaths from 1980 to 1990 was similar to the 35 percent increase in the population during that 11-year period.

All death rates discussed in this section are age-adjusted, a process which controls for differences in the age composition of populations among time periods or between regions, genders or other relevant demographic variables. The adjustment process makes age-adjusted mortality rates better indicators than crude death rates of temporal changes and differences among diverse populations or subgroups of the populations. **Thus, the reader should understand that the term age-adjusted precedes the word rate even though it was eliminated from the text to make reading easier.**

The 1990 total mortality rate was 524.4 per 100,000, 10 percent lower than the 1980 rate and the lowest annual rate of the 1980 to 1990 period (Table 2-1). Between 1980 to 1985, annual total mortality rates for Arizona and the U.S. fluctuated as to which was higher. Since 1986, annual total mortality rates in Arizona consistently exceeded annual U.S. rates (Figure 8).

Cause-specific Mortality From 1980 to 1990

During an average week in 1990, approximately 167 Arizona residents died from heart disease, 130 from cancer, 33 from cerebrovascular diseases or stroke, 30 from unintentional injuries, 30 from chronic obstructive pulmonary disease (COPD), 23 from pneumonia/influenza, 13 committed suicide, 11 from infectious and parasitic diseases including Human Immunodeficiency Virus (HIV) infections, 10 from diabetes, and 6 from alcoholism. These 12 leading causes accounted for 83 percent of the deaths among Arizonans in 1990.

Hypertension, high blood cholesterol, smoking and obesity are risk factors which heart disease and stroke share. From 1980 to 1990, deaths rates from heart disease and stroke declined by at least 20 percent in Arizona and by at least 26 percent in the U.S. (Table 2-1, Figure 9, Figure 14). The greater national decline reduced the advantage in mortality from heart disease and stroke that Arizonans have with respect to their national peers. Arizona heart disease rates were 11 percent lower than the U.S. rate in 1980 but only 4 percent lower in 1990. The Arizona advantage in stroke mortality rate went from 14 percent lower in 1980 to virtually non-existent in 1990.

Neither Arizona nor the nation made progress from 1980 to 1990 in reducing death rates for cancer (Figure 10). The 1990 rate for both the state and nation differed from the respective 1980 rate by no more than one percent. Reduced heart disease death rates coupled with no reduction in cancer mortality rates considerably diminished the relative probability of death from heart disease compared to cancer. In 1980, heart disease claimed Arizonans' lives at a 47 percent higher rate than did cancer. By 1990, heart disease was only a 16 percent greater mortality risk than cancer. A likely projection for the 21st century is that cancer will displace heart disease as the leading cause of death.

Despite a 24 percent reduction in unintentional injury mortality rates from 1980 to 1990, this cause still posed more than a 20 percent higher risk of death for Arizonans than their national peers (Figure 11, 12, 13). Both components of unintentional injuries, motor vehicle related or not related, fell by the same degree for Arizonans from 1980 to 1990. In contrast, the elevation of Arizona over the U.S. increased for rates of death from self-inflicted intentional injuries, because suicide rates rose for Arizonans but were quite stable nationally (Figure 17). The 1990 Arizona suicide death rate exceeded the national rate by 57 percent.

From 1980 to 1990, mortality rates for COPD increased by 24 percent nationally, but slightly declined in Arizona (Figure 15). These different temporal trends more than halved the mortality disadvantage of Arizona compared to the nation, with the mortality risk of Arizonans going from 74 percent greater to 32 percent greater. In contrast, the mortality disadvantage of Arizona compared to the U.S. in rates of death from pneumonia/influenza was larger in 1990 than in 1980, increasing from 31 percent greater to 39 percent greater. The 1990 death rate for pneumonia/influenza in Arizona was the highest of the 11-year period from 1980 to 1990 (Figure 16).

Death rates for infectious and parasitic diseases more than doubled in Arizona from 1980 to 1990 largely because of the growing contribution of HIV infection-related deaths. Mortality from HIV infection occurred at twice as high a rate in 1990 than in 1987. However, annual HIV-infection death rates have been consistently lower in Arizona than in the United States (Figure 19).

Mortality from alcoholism clearly improved in Arizona, with the 1990 rate 30 percent lower than the 1990 rate. Moreover, only one annual rate since 1986 equalled or exceeded 9.0 per 100,000, while every annual rate from 1980 to 1985 did so.

Gender Differences in Mortality From 1980 to 1990

In each of the 11 years from 1980 to 1990, Arizona male total mortality rates were lower than U.S. male total mortality rates (Table 2-2). In contrast, in the most recent 9 of those 11 years, Arizona females died at a higher rate than their national counterparts, with the excess equaling 5 percent in 1990. The decline from 1980 to 1990 in total mortality for each gender was larger in the nation than the state. Arizona females had the smallest decrease at 8 percent, followed by U.S. females at 10 percent, Arizona males at 12 percent, and U.S. males at 14 percent.

From 1980 to 1990, Arizona males compared to females had larger declines in death rates for heart disease, unintentional injuries and stroke, with each cause-specific decline for males equaling at least 23 percent. No decline in female death rates for these three causes was as large. Moreover, male mortality rates for COPD also fell by this amount, while female COPD death rates increased by 45 percent. Females remained at greater risk than males to die from a stroke in 1990 as they were in 1980. Males had a greater mortality risk than females on the remaining 10 leading causes in Table 2-2.

Little difference occurred in cancer death rates from 1980 to 1990 for either gender. For males, death rates for suicide rose by 15 percent, for diabetes by 32 percent, and for infectious and parasitic diseases by 194 percent. The last large increase was overwhelmingly due to deaths from HIV infection, with mortality rates for this cause more than tripling from 1987 to 1990. In contrast, females died from either their own hand or from diabetes at lower rates in 1990 than in 1980 and their increase in death rates from infectious and parasitic diseases was only 22 percent.

The 1990 female mortality rate for alcoholism was the lowest and the 1990 male alcoholism death rate was the second lowest of the 11 years. Both genders experienced declines of at least 29 percent in death rates for this cause from 1980 to 1990. The 1990 homicide death rate for both genders was neither the highest nor the lowest of the 11 year period.

Urban and Rural Differences in Mortality by Gender in 1980 and 1990

Rural total mortality rates were 6 percent higher than the urban rate in 1990 as compared to 8 percent higher in 1980 (Table 2-3). The rural elevation was primarily attributable to the disadvantage of rural males relative to urban males, since rural and urban female total mortality rates differed very little either in 1980 or 1990.

In 1980, rural males had the highest mortality rate of the four region and gender groups on 5 of the 11 causes in Table 2-3, specifically unintentional injuries, pneumonia/influenza, suicide, alcoholism and homicide. Due to a 65 percent increase from 1980 to 1990 in their diabetes death rate, rural males assumed the highest mortality rate among the groups for this cause of death in 1990. In addition, because the decline in heart disease death rates was smaller for rural than urban males, rural males displaced urban males from their position as the group with the highest or worst heart disease mortality rate. Thus, in 1990, rural males had the highest risk of dying from 7 out of 11 leading causes of death. Compared to the region and gender group ranked lowest on these 7 causes, the excess risk of dying for rural males was greatest for suicide at 683 percent, followed by unintentional injuries at 376 percent, alcoholism at 374 percent, homicide at 245 percent, diabetes at 104 percent, heart disease at 71 percent, and pneumonia/influenza at 46 percent.

Urban males had the highest cause-specific mortality rate for cancer, COPD, and infectious and parasitic diseases in both 1980 and 1990. Stroke had its highest death rate among urban females in both years. Moreover, urban females had the smallest decline in stroke mortality rates from 1980 to 1990. This fact widened their excess risk to die from a stroke compared to the group with the next highest mortality rate from 5 percent in 1980 to 12 percent in 1990.

Total Mortality by County From 1980 to 1990

Seven counties experienced at least the 10 percent decline in total mortality rates shown by the overall state rate (Table 2-4). The rank-order of the counties from largest to smallest decrease was Greenlee (29 percent), Santa Cruz (28 percent), Yuma (27 percent), LaPaz (20 percent), Yavapai (16 percent), Coconino (11 percent), and Graham (10 percent). Coconino, Santa Cruz, Yavapai, and Yuma counties also had 1990 total mortality rates below the 1990 state rate as did Maricopa county.

The total mortality rates for Apache, Navajo and Pinal counties exceeded the state rate by a greater amount in 1990 than in 1980, with 1990 exceedances of 31, 21, and 13 percent respectively. Eight earlier annual rates during the 11-year period were lower than the 1990 total mortality rate for Apache county. The 1990 total mortality rate for Cochise county was higher than seven earlier annual rates. For all other counties, no more than four earlier annual rates exceeded the 1990 rate. Indeed, the 1990 total mortality rates for Gila, Maricopa, Santa Cruz, Yavapai, Yuma and LaPaz counties were the lowest of the 11-year period (8-year period for LaPaz county). Among these counties with an 11-year low in total mortality in 1990, Santa Cruz had the lowest mortality rate, followed by Yuma, Yavapai, Maricopa, LaPaz, and Gila counties.

Cause-Specific Mortality by County in 1980 and 1990

This year a county's profile on cause-specific mortality is described differently. Instead of starting with a cause and indicating the standing of counties on that cause, we start with a county and describe the county's status on all of the causes with a minimally reliable rate. The criterion of a minimally reliable rate was at least 10 deaths from the cause. The county profiles used the following definitions. A county was considered to have the highest or lowest mortality risk from a cause if it had the highest or lowest rate among the counties based on the data presented in Table 2-5. Higher mortality risk applied when a mortality rate was not the highest among the counties but was at least 12 percent above the state rate. Conversely, lower mortality risk applied when a rate was not the lowest among the counties but was at least 12 percent below the state rate. When a county's rate met none of the prior definitions but was based on the criterion number of deaths, the mortality risk was called average, i.e. at the level of all residents of the state. All comparisons use the state not the U.S. rate.

The reader is reminded that the term lowest or lower mortality risk does not mean that persons with the disease do not die from it. A county relative to the state may have low rates of death from diseases which occur mainly at older ages (e.g., heart disease, cancer, and stroke) because it has high death rates from causes which occur primarily at younger ages (e.g., unintentional injuries). Thus, the number of survivors in the population who may acquire the diseases of older age are seriously reduced.

In the profiles for each county, an abbreviation is used for each of the 13 causes under consideration for ease of presentation. These abbreviations are:

HD = HEART DISEASE
CA = CANCER
UI = UNINTENTIONAL INJURIES
MVI = MOTOR VEHICLE RELATED INJURIES
OI = OTHER INJURIES NOT RELATED TO MOTOR VEHICLES
STR = STROKE OR CEREBROVASCULAR DISEASE
COPD = CHRONIC OBSTRUCTIVE PULMONARY DISEASE
P&I = PNEUMONIA AND INFLUENZA
SUC = SUICIDE
DIA = DIABETES
IPD = INFECTIOUS AND PARASITIC DISEASES
HIV = HUMAN IMMUNODEFICIENCY VIRUS INFECTION
ALC = ALCOHOLISM

Those causes with no deaths or which do not meet the criterion for a minimally reliable rate (MRR) for a county also are given in the profile under less than MRR. The HIV infection epidemic did not begin until 1981, so this cause of death is never given in the 1980 cause-specific profile of any county. The cause-specific profile for each county is given below.

	1980	1990
Apache County		
Highest mortality risk:	UI; MVI	UI; MVI; OI; P&I
Higher mortality risk:	OI; I&P	IPD; ALC
Lowest mortality risk:	None	CA
Lower mortality risk:	HD; CA	None
Average mortality risk:	None	HD; STR; SUC
Less than MRR:	STR; COPD; SUC; IPD; DIA; ALC	COPD; DIA; HIV
Cochise County		
Highest mortality risk:	None	IPD
Higher mortality risk:	UI; OI; P&I;SUC	HD; DIA
Lowest mortality risk:	IPD	None
Lower mortality risk:	None	MVI
Average mortality risk:	HD; CA; MVI;STR; COPD; DIA; ALC	CA; UI; OI; STR; COPD; P&I; SUC
Less than MRR:	None	HIV; ALC
Coconino County		
Highest mortality risk:	None	STR
Higher mortality risk:	UI; OI; STR; P&I	UI; MVI; OI DIA; ALC
Lowest mortality risk:	None	P&I
Lower mortality risk:	HD; CA	HD; CA; SUC; IPD
Average mortality risk:	MVI	None
Less than MRR:	COPD; SUC; DIA; IPD; ALC	COPD; HIV
Gila County		
Highest mortality risk:	None	HD; SUC
Higher mortality risk:	UI; MVI; OI; P&I; ALC	UI; MVI; OI; ALC
Lowest mortality risk:	CA	COPD

Lower mortality risk:	COPD	CA; STR; P&I; IPD
Average mortality risk:	HD; STR	None
Less than MRR:	SUC; DIA; IPD	DIA; HIV

Graham County

Highest mortality risk:	CA; OI	CA
Higher mortality risk:	UI; P&I	STR; P&I
Lowest mortality risk:	None	None
Lower mortality risk:	None	None
Average mortality risk:	HD	HD; UI; OI
Less than MRR:	MVI; STR; COPD; SUC; DIA; IPD; ALC	MVI; COPD; SUC; DIA; IPD; HIV; ALC

Greenlee County

Highest mortality risk:	HD; COPD	None
Higher mortality risk:	UI	UI; COPD; IPD
Lowest mortality risk:	None	None
Lower mortality risk:	None	None
Average mortality risk:	None	HD; CA
Less than MRR:	CA; MVI; OI; STR; P&I SUC; DIA; IPD; ALC	MVI; OI; STR; P&I SUC; DIA; HIV; ALC

LaPaz County (Only came into existence in 1983, so 1980 data not available).

Highest mortality risk:		None
Higher mortality risk:		UI
Lowest mortality risk:		None
Lower mortality risk:		HD
Average mortality risk:		CA
Less than MRR:		10 OTHER CAUSES

Maricopa County

Highest mortality risk:	None	HIV
Higher mortality risk:	None	None
Lowest mortality risk:	MVI	MVI; ALC
Lower mortality risk:	UI; OI; P&I; ALC	UI; DIA;
Average mortality risk:	HD; CA; STR;	HD; CA; OI; STR;

	COPD; SUC; DIA; IPD	COPD; P&I; SUC; IPD
Less than MRR:	None	None
Mohave County		
Highest mortality risk:	SUC	None
Higher mortality risk:	HD; UI; MVI; OI	UI; MVI; OI; SUC ALC
Lowest mortality risk:	COPD; P&I	IPD
Lower mortality risk:	STR	STR
Average mortality risk:	CA	HD; CA; COPD; P&I DIA
Less than MRR:	DIA; IPD; ALC	HIV
Navajo County		
Highest mortality risk:	P&I; DIA; IPD; ALC	ALC
Higher mortality risk:	UI; MVI; OI	HD; UI; MVI; OI P&I; SUC; DIA
Lowest mortality risk:	STR	None
Lower mortality risk:	CA	CA; STR; COPD
Average mortality risk:	HD; SUC	None
Less than MRR:	COPD	IPD; HIV
Pima County		
Highest mortality risk:	None	COPD
Higher mortality risk:	COPD; P&I	ALC
Lowest mortality risk:	UI; OI; SUC	None
Lower mortality risk:	None	HD; MVI
Average mortality risk:	HD; CA; MVI; STR DIA; IPD; ALC	CA; UI; OI; STR P&I; SUC; DIA; IPD HIV
Less than MRR:	None	None
Pinal County		
Highest mortality risk:	None	DIA
Higher mortality risk:	UI; MVI; OI; COPD; P&I; SUC; DIA; ALC	UI; MVI; SUC; ALC

Lowest mortality risk:	None	OI
Lower mortality risk:	CA; STR	CA; STR; IPD
Average mortality risk:	HD; IPD	HD; COPD; P&I
Less than MRR:	None	HIV

Santa Cruz County

Highest mortality risk:	None	None
Higher mortality risk:	CA	None
Lowest mortality risk:	HD	HD
Lower mortality risk:	None	CA
Average mortality risk	None	None
Less than MRR:	10 OTHER CAUSES	11 OTHER CAUSES

Yavapai County

Highest mortality rate:	None	None
Higher mortality rate:	UI; MVI; OI; COPD SUC; IPD	SUC
Lowest mortality rate:	DIA; ALC	DIA
Lower mortality rate:	P&I	OI; IPD
Average mortality rate:	HD; CA; STR	HD; CA; UI; MVI STR; COPD; P&I
Less than MRR:	None	HIV; ALC

Yuma County

Highest mortality rate:	STR	None
Higher mortality rate:	UI; OI; COPD DIA; ALC	None
Lowest mortality rate:	None	UI; STR; SUC
Lower mortality rate:	CA	HD; OI; STR; P&I
Average mortality rate:	HD; MVI; P&I; SUC	CA; MIV; DIA; IPD
Less than MRR:	IPD	HIV; ALC

Total and Cause-Specific Mortality by Ethnicity in 1980 and 1990

Hispanics showed the largest decrease in total mortality rates at 18 percent, followed by Blacks at 11 percent, white non-Hispanics at 9 percent, and Native

Americans at 2 percent (Table 2-6). Hispanics had the best survival chances among the ethnic groups in 1980 and the fact that they had the largest drop in mortality further distanced them from the other ethnic groups by 1990. In 1980, the total mortality rate for Hispanics was 3, 32 and 36 percent below the total mortality rate of white non-Hispanics, Blacks and Native Americans respectively. The 1990 respective amounts by which Hispanic total mortality was below the other groups were 13, 38 and 46 percent (Figure 20).

The discussion of cause-specific mortality will concentrate on the five leading causes of death for each ethnic group (Figure 21, 22, 23, 24, 25, 26). The closest similarity among the ethnic groups in 1980 cause-specific mortality was that heart disease, cancer, unintentional injuries and stroke ranked as the first, second, third and fourth leading causes of death respectively for white non-Hispanics, Hispanics and Blacks. That same ranking held for Blacks and Hispanics in 1990, but stroke was replaced in fourth position by COPD among white non-Hispanics. These three ethnic groups all had a decline in the rates of death from heart disease, unintentional injuries and stroke. Death rates for cancer either remained stable or increased. Blacks had the highest death rates on heart disease, cancer and stroke in both 1980 and 1990, even when Native Americans also were in the comparison.

Unintentional injuries was the top leading cause of death of Native Americans in both years. Moreover, Native Americans exceeded the unintentional injury death rate of any other ethnic group by at least 200 percent in 1980 and by at least 210 percent in 1990, indicating a widening inequality in risk of death from this cause for Native Americans. The second leading cause of death for Native Americans was heart disease and the 1990 rate was intermediate between the rates for white non-Hispanics and Hispanics. Alcoholism was the third leading cause of death for Native Americans in 1980 but it dropped to sixth in 1990 and the rank of three was occupied by cancer.

The fourth leading cause of Native American death in 1990 was diabetes, and the rate of death from diabetes had increased from the 1980 level for both Native Americans and Hispanics. Diabetes was the fifth leading cause of Hispanic death in 1990, but it ranked no higher than 9th as a cause of either white non-Hispanic or Black death.

In both 1980 and 1990, pneumonia/influenza was the fifth leading cause of Native American deaths, while homicide occupied this ranking for Blacks. Death rates for pneumonia/influenza fell by 14 percent from 1980 to 1990, but in 1990 Native Americans were at least 2.5 times to die from this cause than any other ethnic group, an increase of 50 percent in the gap in the mortality risk between Native Americans and the other ethnic groups. The Black homicide death dropped 27 percent from 1980 to 1990, but

Blacks were 5.5 times more likely to be murdered in 1990 than were white non-Hispanics and at least 65 percent more likely than Hispanics and Native Americans.

Largely due to the HIV infection epidemic, the mortality rates for infectious and parasitic diseases increased by at least 85 percent for each ethnic group from 1980 to 1990. This raised the cause in the rank order of deaths by at least three places, so that it ranked 7th or 8th in 1990. However, the proportional contribution of deaths from HIV infection to deaths from infectious and parasitic diseases varied from a low of 2 percent among Native Americans to a high of 54 percent among white non-Hispanics. Hispanics and Blacks were intermediate in terms of the proportion of HIV infection deaths with percents of 36 and 49 respectively. However, Blacks had the highest 1990 death rate for both infectious and parasitic disease and HIV infection, with the HIV infection death rate 72 percent higher than the rate for the next highest group, namely white non-Hispanics.

Premature Mortality by Ethnicity, Gender and/or Cause

Average age at death. The average age of Arizonans who died in 1980 was 65.3 years, with males below the mean at 63.1 years and females above the mean at 68.3 years (Table 2-7). With one exception, the age average age at death increased yearly to 68.4 years in 1990, a gain of 3.1 years. Females gained an average of 3.9 years, while males gained 2.3 years.

Neither the average age of death nor the gains given above applied to any of the three ethnic minority groups, while white non-Hispanics, as the majority ethnic group, either closely matched the values or exceeded them. The most discrepant ethnic minority was Native Americans whose average age at death in 1980 was only 50.1 years, with a mere increase to 51.4 years by 1990. Moreover, the gain was confined solely to Native American females who gained 4.4 years from 1980 and died at an average age of 56.1 years. In contrast, Native American males gained nothing and, in fact, on average died at a younger average age in 1990 than in 1980.

The temporal change was little better for Black males who only gained an average of 0.3 years from 1980 to 1990 and died at an average age of 55 in 1990. Black females made more progress with their gain of 1.2 years to die at an average age of 61.6 years in 1990. Improvement was somewhat more pronounced for Hispanics of both genders. Hispanic males gained 1.6 years with the average age of death in 1990 being just before the 55th birthday. The average age at death of Hispanic females of 64 years in 1990 occurred after a gain of 2.4 years over 1980.

Clearly, ethnic minorities of both genders did die and continue to die at a younger average age than their respective white non-Hispanics peers. Moreover, since with the exception of Native American females, the gains made by ethnic minorities were smaller than the gains made by white non-Hispanics, the differences in average age at death are increasing. In other words, the inequity between white non-Hispanics and the ethnic minorities in terms of expectation of a long and fruitful life is widening rather than narrowing. In 1980, compared to white non-Hispanic males, on average Hispanic males were 12.3 years younger at time of death, Black males were 10.1 years younger, and Native American males were 16.2 years younger. In 1990, the respective differences in average age of death between white non-Hispanic males and each ethnic minority group were 13.3 years, 12.4 years, and 19.2 years. The differences in average age of death between white non-Hispanic females and Hispanic, Black and Native American females in 1980 were 8.4 years younger, 9.7 years younger, and 18.4 years younger respectively, while in 1990 the differences were 9.8, 12.3 and 17.8 years younger respectively.

Proportion and age of premature deaths. As expected based on the findings for average of death, reductions of any substantial amount in the proportion of deaths that occur before the expected years of life are reached were largely confined to white non-Hispanics of either gender and Native American females (Table 2-8). Similarly, the same circumstance applied to increases of note in the average age at which premature death occurred (Table 2-9).

In 1980, white non-Hispanic males who died prematurely did so at an average age of almost 56 years which was 14 years later than the average age of premature deaths for Hispanic males, 8 years later than the average age of premature death of Black males, and 17 years later than the average age of premature death of Native American males. By 1990, the difference between white non-Hispanic males and either Black or Native American males in average age at premature death was even larger. Compared to white non-Hispanic males, Black males were 11 years younger on average when they prematurely died and Native American males were 18 years younger on average. In contrast, the difference between white non-Hispanic and Hispanic males in average age at premature death had been reduced from 14 years in 1980 to 12 years in 1990.

Average age at premature death for Hispanic and Black females did not improve from 1980 to 1990. An improvement of 3.4 years was recorded for white non-Hispanic females and of 4.2 years for Native American females. Thus, the relative position of Black and Hispanic females worsened with respect to white non-Hispanic females. In 1990, compared to white non-Hispanic females, both Black and Hispanic females were 12 years younger on average at time of premature death. The disparity between average age of premature death between white non-Hispanic and Native American females was reduced from 16 years younger in 1980 to 15 years younger on average in 1980.

Cause-specific average age at death and premature death ratio. All deaths from HIV infection are premature and the average age at death from HIV infection was 38 years (Table 2-10). The average age at death was lower only for motor vehicle related injuries, which had an average age of 37.3 years and a premature death ratio of almost 93 percent. The other causes for which a majority of the deaths were premature were in rank order from high to low percent alcoholism (92 percent), suicide (89 percent), unintentional injuries not related to motor vehicles (76 percent), cancer (62 percent), and diabetes (58 percent). The cause of death with both the highest average age at death and lowest premature death ratio was pneumonia and influenza.

The minority of heart disease deaths are premature only for females in either region, white non-Hispanic females or Hispanic females. The majority of males who die from heart disease do so prematurely, irrespective of region or ethnicity. Over 60 percent of heart disease deaths were premature among Black and Native American males. In contrast, nearly 60 percent of cancer deaths were premature in every gender by region group and every gender by ethnicity group.

Native American females had the lowest average age of death from unintentional injuries and white non-Hispanics females had the highest. At least one-half of stroke deaths were premature only for Hispanic males and Native American females. Premature deaths from COPD were a majority occurrence only among rural females, Hispanic males, Blacks of either gender, and Native American females. Native American males had the lowest average age at death from suicide, dying at an average age of less than 30 years. The average age at death from suicide was also below 30 years for Black females. Less than 50 percent of deaths from diabetes were premature in 1990 only for urban females, white non-Hispanic females, and Black females.

TABLE 2-1

TRENDS IN AGE-ADJUSTED[1] MORTALITY RATES FOR LEADING CAUSES OF DEATH[2] IN ARIZONA AND THE UNITED STATES,[3] 1980-1990

CAUSE/AREA	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
DISEASES OF HEART											
Arizona	180.0	176.8	182.3	171.2	166.9	162.5	157.9	161.9	157.9	150.8	144.3
United States	202.0	195.0	190.5	188.5	183.3	181.7	175.4	169.9	166.7	155.9	150.3
MALIGNANT NEOPLASMS											
Arizona	122.8	120.0	121.8	122.3	123.9	125.2	126.1	128.6	126.3	122.5	124.1
United States	132.8	131.6	132.5	132.3	133.1	132.5	132.5	133.1	133.3	133.7	133.0
UNINTENTIONAL INJURIES, TOTAL											
Arizona	52.4	51.4	44.8	40.8	44.8	42.9	44.3	43.0	43.2	39.1	39.7
United States	42.3	39.8	36.6	34.9	35.6	34.3	35.5	34.6	35.1	33.5	32.7
Motor vehicle-related											
Arizona	31.7	31.3	24.6	22.7	27.5	27.0	27.9	26.4	25.1	22.3	23.8
United States	22.9	21.8	19.3	18.1	19.2	18.3	19.8	19.7	20.1	19.4	18.9
Other than motor vehicle											
Arizona	20.7	20.1	20.2	18.1	17.3	15.9	16.4	16.6	18.1	16.8	15.9
United States	19.5	18.0	17.3	16.8	16.4	16.0	15.7	14.9	15.0	14.1	13.8
CEREBROVASCULAR DISEASES											
Arizona	34.9	31.9	30.7	31.0	31.9	29.1	27.5	27.4	26.6	26.9	27.4
United States	40.8	38.1	35.8	34.3	33.9	32.3	30.4	30.1	29.8	28.5	27.6
CHRONIC OBSTRUCTIVE PULMONARY DISEASE											
Arizona	27.6	25.0	24.2	24.7	26.4	26.3	27.6	26.5	26.1	27.0	26.1
United States	15.9	16.3	16.2	17.6	18.0	18.6	18.5	18.7	19.2	19.4	19.7
PNEUMONIA AND INFLUENZA											
Arizona	16.9	13.9	14.3	12.7	16.2	15.0	16.6	15.6	17.7	18.3	18.8
United States	12.9	12.3	10.9	11.2	12.2	13.2	13.6	13.2	14.2	13.3	13.5
SUICIDE											
Arizona	16.5	16.2	16.8	16.6	16.5	17.1	17.8	19.3	17.8	17.1	17.7
United States	11.4	11.5	11.6	11.7	11.6	11.5	11.7	11.7	11.3	11.7	11.3
DIABETES											
Arizona	9.1	8.6	9.0	10.5	9.6	10.0	9.5	10.0	10.7	11.8	9.8
United States	10.1	9.8	9.6	9.8	9.9	10.1	9.4	9.6	9.9	11.3	11.7
INFECTIOUS AND PARASITIC DISEASES[4]											
Arizona	6.3	7.4	7.1	6.5	6.9	7.8	7.3	10.3	11.6	12.9	13.5
United States	5.8	6.2	6.2	6.6	7.9	8.2	9.1	13.5	14.9	NA	NA
HIV Infection											
Arizona	NA	NA	NA	NA	NA	NA	NA	3.0	4.5	5.4	6.4
United States	NA	NA	NA	NA	NA	NA	NA	5.5	6.6	8.3	9.1
ALCOHOLISM											
Arizona	11.9	11.4	10.7	9.0	10.8	10.0	8.1	8.0	9.3	8.4	8.3
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALL CAUSES											
Arizona	582.7	560.6	570.6	547.3	552.0	544.2	543.6	548.4	544.2	529.2	524.4
United States	585.8	568.2	553.8	550.5	545.9	546.1	541.7	536.2	536.3	524.1	515.1

[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.

[2] Leading causes are those 10 causes with the greatest total number of deaths in Arizona in 1990.

[3] The U.S. data furnished by the National Center for Health Statistics; 1989 and 1990 data are provisional.

[4] Beginning in January 1987, includes data for the category numbers 042-044 (HIV infection), following the redefinition by the National Center for Health Statistics.

TABLE 2-2

TOTAL AGE-ADJUSTED MORTALITY RATES[1] FOR LEADING CAUSES OF DEATH[2] BY GENDER IN ARIZONA, 1980-1990

CAUSE/GENDER	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
DISEASES OF HEART											
Male	238.0	233.4	232.5	223.9	218.9	210.5	206.0	211.2	201.7	192.2	182.0
Female	130.8	128.3	130.8	126.5	122.9	121.5	117.5	120.0	120.4	115.8	112.1
MALIGNANT NEOPLASMS											
Male	145.6	145.5	147.2	146.2	147.6	148.4	150.0	154.3	153.9	144.1	148.3
Female	104.8	99.3	101.5	105.6	105.6	107.3	108.0	108.9	104.5	106.1	105.0
UNINTENTIONAL INJURIES, TOTAL											
Male	78.9	77.1	63.5	60.1	66.4	62.3	63.5	62.7	62.5	59.0	58.2
Female	26.7	26.2	25.6	23.9	23.6	23.9	25.4	23.6	23.8	19.8	21.2
Motor vehicle-related											
Male	47.1	46.6	34.7	33.2	40.0	40.0	39.4	38.0	35.6	33.0	33.6
Female	16.8	16.2	13.8	12.3	14.3	14.3	16.5	14.9	14.6	12.0	13.8
Other than motor vehicle											
Male	31.8	30.5	28.8	26.9	25.5	22.3	24.0	24.7	26.8	26.0	24.6
Female	10.0	10.0	11.8	11.7	9.3	9.6	8.8	8.7	9.2	7.8	7.4
CEREBROVASCULAR DISEASES											
Male	34.1	31.7	30.1	30.9	32.8	30.7	27.5	27.9	26.1	26.9	26.1
Female	35.5	31.9	31.0	31.1	31.1	27.9	27.6	26.8	26.8	26.7	28.4
CHRONIC OBSTRUCTIVE PULMONARY DISEASE											
Male	43.1	38.0	36.8	35.7	37.6	35.9	38.4	35.5	34.7	34.0	31.9
Female	14.8	14.6	14.1	15.9	17.3	18.9	19.1	19.4	20.0	22.0	21.5
PNEUMONIA AND INFLUENZA											
Male	20.4	18.1	18.0	16.4	20.1	18.0	19.6	18.7	19.9	21.0	21.7
Female	13.9	11.8	11.2	9.7	13.1	12.5	14.2	13.1	15.9	15.9	16.5
SUICIDE											
Male	26.1	23.9	25.4	25.2	26.2	27.5	27.2	30.0	29.4	28.5	29.9
Female	7.5	8.9	8.8	8.5	7.2	7.2	8.8	8.9	6.6	6.4	6.0
DIABETES											
Male	8.4	9.5	9.3	11.3	10.5	10.7	10.8	9.9	12.1	12.5	11.1
Female	9.6	7.9	8.6	9.9	8.8	9.6	8.4	9.8	9.5	11.4	8.7
INFECTIOUS AND PARASITIC DISEASES[3]											
Male	7.0	7.6	7.2	6.4	6.7	8.6	7.9	8.7	16.9	19.2	20.6
Female	5.4	4.9	5.6	5.4	5.6	5.8	5.5	5.8	6.2	6.7	6.6
HIV Infection											
Male	NA	NA	NA	NA	NA	NA	NA	4.0	8.3	10.4	12.2
Female	NA	NA	NA	NA	NA	NA	NA	0.3	0.4	0.3	0.6
ALCOHOLISM											
Male	17.4	17.3	15.4	14.3	15.3	14.5	12.6	11.3	14.2	12.6	12.4
Female	7.0	5.9	6.5	5.6	6.6	6.7	4.0	5.0	4.7	4.5	4.4
HOMICIDE											
Male	15.9	15.7	14.7	13.5	13.5	11.8	15.0	12.5	13.6	13.2	13.1
Female	5.5	4.8	4.0	3.5	4.2	4.6	4.7	3.9	5.3	5.1	4.3
ALL CAUSES											
AZ Male	743.9	723.8	698.5	685.5	698.6	686.9	686.2	690.8	684.2	659.2	655.5
Female	441.7	416.9	421.2	420.3	425.6	418.0	420.1	424.3	420.9	416.0	407.8
U.S. Male	777.2	753.3	733.1	725.3	716.7	716.8	709.1	698.6	699.8	679.6	668.9
Female	432.6	420.4	411.2	411.5	409.7	409.4	406.6	403.3	403.5	396.4	389.0

[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.

[2] Leading causes are those 11 causes with the greatest number of deaths in 1990.

[3] Beginning in January 1987, includes data for the category numbers 042-044 (HIV infection), following the redefinition by the National Center for Health Statistics.

TABLE 2-3

AGE-ADJUSTED MORTALITY RATES[1] FOR LEADING CAUSES OF DEATH[2] BY GENDER IN URBAN AND RURAL AREAS, ARIZONA, 1980 AND 1990

	BOTH GENDERS			MALE			FEMALE		
CAUSE/YEAR	Statewide	Urban	Rural	Statewide	Urban	Rural	Statewide	Urban	Rural
DISEASES OF HEART									
1980	180.0	176.4	171.1	238.0	240.0	230.5	130.8	133.8	120.3
1990	144.3	144.4	143.9	182.0	181.6	183.9	112.1	113.4	107.4
% change from 1980:	-19.8	-18.1	-15.9	-23.5	-24.3	-20.2	-14.3	-15.3	-10.7
MALIGNANT NEOPLASMS									
1980	122.8	124.3	105.5	145.6	152.1	124.9	104.8	109.1	90.8
1990	124.1	126.0	117.8	148.3	150.8	140.0	105.0	106.8	98.2
% change from 1980:	+1.1	+1.4	+11.7	+1.9	-0.9	+12.1	+0.2	-2.1	+8.2
UNINTENTIONAL INJURIES, TOTAL									
1980	52.4	43.9	72.7	78.9	66.4	114.4	26.7	24.8	33.0
1990	39.7	34.5	60.6	58.2	49.5	92.4	21.2	19.4	28.3
% change from 1980:	-24.2	-21.4	-16.6	-26.2	-25.5	-19.2	-20.6	-21.8	-14.2
Motor Vehicle-Related									
1980	31.7	27.5	41.4	47.1	41.8	61.6	16.8	15.2	22.1
1990	23.8	19.9	39.3	33.6	27.5	57.6	13.8	12.1	20.8
% change from 1980:	-24.9	-27.6	-5.1	-28.7	-34.2	-6.5	-17.9	-20.4	-5.9
Other than Motor Vehicle									
1980	20.7	16.4	31.3	31.8	24.6	52.8	9.9	9.6	10.9
1990	15.9	14.6	21.3	24.6	22.0	34.9	7.4	7.3	7.5
% change from 1980:	-23.2	-11.0	-32.0	-22.6	-10.6	-33.9	-25.3	-24.0	-31.2
CEREBROVASCULAR DISEASE									
1980	34.9	34.4	32.4	34.1	34.5	32.9	35.5	36.2	33.3
1990	27.4	28.0	25.0	26.1	26.2	25.6	28.4	29.4	24.6
% change from 1980:	-21.5	-18.6	-22.8	-23.5	-24.1	-22.2	-20.0	-18.8	-26.1
CHRONIC OBSTRUCTIVE PULMONARY DISEASE									
1980	27.6	27.9	24.0	43.1	45.0	38.1	14.8	16.0	11.0
1990	26.1	26.7	24.0	31.9	32.8	29.0	21.5	22.0	19.7
% change from 1980:	-5.4	-4.3	0.0	-26.0	-27.1	-23.9	+45.3	+37.5	+79.1
PNEUMONIA AND INFLUENZA									
1980	16.9	15.2	20.1	20.4	18.5	25.7	13.9	13.4	15.9
1990	18.8	18.4	20.2	21.7	21.1	23.8	16.5	16.3	17.2
% change from 1980:	+11.2	+21.1	+0.5	+6.4	+14.1	-7.4	+18.7	+21.6	+8.2
SUICIDE									
1980	16.5	15.5	18.2	26.1	24.2	30.5	7.5	7.8	6.6
1990	17.7	16.8	21.1	29.9	27.6	37.6	6.0	6.3	4.8
% change from 1980:	+7.3	+8.4	+15.9	+14.6	+14.1	+23.3	-20.0	-19.2	-27.3
DIABETES									
1980	9.1	7.8	11.3	8.4	8.0	9.4	9.6	8.4	13.6
1990	9.8	8.6	14.1	11.1	9.8	15.5	8.7	7.6	12.8
% change from 1980:	+7.7	+10.3	+24.8	+32.1	+22.5	+64.9	-9.4	-9.5	-5.9
INFECTIOUS AND PARASITIC DISEASES									
1980	6.3	6.4	5.6	7.0	7.2	6.6	5.4	5.9	4.8
1990	13.5	14.2	10.5	20.6	22.8	12.0	6.6	6.0	8.9
% change from 1980:	+114.3	+121.9	+87.5	+194.3	+216.7	+81.8	+22.2	+1.7	+85.4
HIV Infection[3]									
1990	6.4	11.4	2.4	12.2	14.0	4.8	0.6	0.8	-
ALCOHOLISM									
1980	11.9	10.1	16.2	17.4	14.8	24.6	7.0	6.6	8.4
1990	8.3	7.1	12.5	12.4	10.7	18.5	4.4	3.9	6.7
% change from 1980:	-30.3	-29.7	-22.8	-28.7	-27.7	-24.8	-37.1	-40.9	-20.2
HOMICIDE									
1980	10.7	8.8	11.8	15.9	14.9	18.1	5.5	5.3	6.5
1990	8.7	8.5	9.6	13.1	13.0	13.8	4.3	4.0	5.3
% change from 1980:	-18.7	-3.4	-18.6	-17.6	-12.8	-23.8	-21.8	-24.5	-18.5
ALL CAUSES									
1980	582.7	554.8	597.2	743.9	731.5	775.2	441.7	441.7	446.1
1990	524.4	518.2	549.2	655.5	644.4	698.5	407.8	408.1	407.8
% change from 1980:	-10.0	-6.6	-8.0	-11.9	-11.9	-9.9	-7.7	-7.6	-8.6

[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.
[2] Leading causes are those 11 causes with the greatest total number of deaths in 1990.
[3] Not available for 1980. The category numbers 042-044 (HIV Infection) were introduced in January 1987 by the National Center for Health Statistics.

TABLE 2-4

TRENDS IN AGE-ADJUSTED MORTALITY RATES[1] FOR ALL CAUSES BY COUNTY, 1980-1990

COUNTY	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
APACHE	694.1	685.3	710.3	658.4	686.3	679.7	663.0	652.7	597.1	617.2	686.7
COCHISE	583.2	545.5	524.6	584.6	524.9	510.1	480.6	535.6	524.7	500.6	545.3
COCONINO	539.5	508.2	535.3	486.2	508.8	548.2	522.9	512.3	508.9	467.9	479.3
GILA	613.7	618.9	718.5	651.4	633.1	583.5	620.3	582.3	587.4	592.5	559.9
GRAHAM	622.1	628.3	556.3	573.6	578.8	549.7	575.2	573.8	565.6	629.2	556.9
GREENLEE	777.5	481.3	664.5	578.9	600.0	441.3	456.8	654.4	599.8	457.5	548.8
MARICOPA	572.9	553.1	540.4	530.3	548.3	541.1	532.0	530.9	525.9	525.5	516.3
MOHAVE	573.5	560.7	590.2	542.2	538.9	607.8	589.4	623.8	638.2	670.2	562.2
NAVAJO	691.3	659.2	613.5	620.7	634.8	700.6	713.9	644.8	643.7	676.1	636.1
PIMA	584.4	552.7	530.7	533.7	540.7	522.7	547.8	549.7	537.3	519.9	539.5
PINAL	633.5	627.0	598.1	602.2	622.6	562.7	669.3	631.9	664.2	698.8	595.3
SANTA CRUZ	491.7	480.2	484.1	479.6	543.1	436.6	436.4	444.7	541.1	464.7	352.9
YAVAPAI	584.3	572.9	571.4	580.5	567.1	543.2	525.2	607.6	591.9	591.5	489.9
YUMA[2]	585.6	561.5	576.7	448.6	429.2	559.1	534.6	518.0	547.5	523.1	428.0
LA PAZ	NA	NA	NA	660.6	634.0	605.6	575.1	645.3	631.9	593.8	531.8
ARIZONA	582.7	560.6	570.6	547.3	552.0	544.2	543.6	548.4	544.2	529.2	524.4
U.S.	585.8	568.2	533.8	549.6	547.7	545.9	540.2	536.2	536.3	524.1	515.1

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[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.

[2] La Paz County included in Yuma County prior to 1983.

SOURCE: U.S. data furnished by the National Center for Health Statistics; 1990 data are provisional.

TABLE 2-5

AGE-ADJUSTED MORTALITY RATES[1] FOR LEADING CAUSES OF DEATH[2] AND AVERAGE AGE AT DEATH FROM ALL CAUSES BY COUNTY, ARIZONA, UNITED STATES, 1980 AND 1990

CAUSE/YEAR	U.S.[3]	Arizona	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz[4]	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
DISEASES OF HEART																	
1980	202.0	180.0	151.7	167.1	139.4	182.5	158.7	354.6	NA	185.9	203.5	171.6	184.2	200.0	128.4	182.1	191.9
1990	150.3	144.3	128.7	165.7	112.3	167.5	144.5	142.3	110.4	143.6	145.5	165.7	151.8	161.9	95.7	131.6	114.7
MALIGNANT NEOPLASMS																	
1980	132.8	122.8	108.2	109.2	96.6	89.9	155.0	57.6*	NA	131.4	111.1	97.7	132.8	105.6	143.3	120.8	136.3
1990	133.0	124.1	94.0	129.6	105.2	108.0	131.1	112.4	123.0	124.8	123.6	104.4	130.4	125.8	102.1	121.6	123.0
UNINTENTIONAL INJURIES																	
1980	42.3	52.4	134.0	61.8	66.9	75.5	86.1	103.7	NA	46.0	71.7	97.5	45.9	65.5	38.9*	70.5	75.4
1990	32.7	39.7	150.2	37.1	58.4	53.2	40.5	76.8	81.8	33.9	63.4	98.7	36.9	52.4	19.4*	38.4	33.2
Motor Vehicle-Related																	
1980	22.9	31.7	92.3	32.9	34.2	52.6	32.9*	65.1*	NA	28.0	39.3	47.4	30.8	45.7	15.2*	44.1	32.9
1990	18.9	23.8	96.7	20.7	36.4	30.6	24.5*	55.2*	48.7*	19.6	41.2	59.5	20.6	41.1	11.4*	24.4	21.2
Other than Motor Vehicle																	
1980	19.5	20.7	41.7	28.9	32.7	22.9	53.2	38.6*	NA	18.0	32.4	50.1	15.1	19.8	23.7*	26.4	42.5
1990	13.8	15.9	53.5	16.4	22.0	22.6	15.9	21.6*	33.1*	14.3	22.2	39.2	16.3	11.3	8.1*	14.0	12.0
CEREBROVASCULAR DISEASE																	
1980	40.8	34.9	16.7*	35.1	41.0	36.7	27.9*	9.4*	NA	36.7	28.1	24.8	33.7	30.0	27.6*	38.9	53.7
1990	27.6	27.4	26.8	25.3	34.2	22.8	32.4	25.9*	15.5*	28.6	21.7	17.7	28.4	28.9	24.0*	26.2	16.5
CHRONIC OBSTRUCTIVE PULMONARY DISEASE																	
1980	15.9	27.6	12.0*	27.0	17.0*	23.0	23.0*	45.0	NA	26.0	18.0	14.0*	36.0	34.0	7.1*	32.0	33.0
1990	19.7	26.1	8.3*	25.2	11.2*	19.9	37.2*	30.6	18.1*	25.5	28.5	22.7	31.0	24.7	8.7*	26.0	22.2
PNEUMONIA AND INFLUENZA																	
1980	12.9	16.9	26.4	21.4	20.8	31.6	32.6	56.1*	NA	14.4	11.1	42.5	20.4	19.2	24.0*	14.8	17.5
1990	13.5	18.8	42.4	20.5	3.8	14.0	27.6	36.5*	10.4*	19.2	17.6	31.8	17.7	19.5	12.0*	18.1	9.7
SUICIDE																	
1980	11.4	16.5	12.8*	20.1	15.1*	15.6*	13.7*	-	NA	16.5	32.7	18.1	14.8	21.1	-	32.0	15.5
1990	11.3	17.7	18.6	19.2	11.7	29.2	-	-	27.4*	17.2	25.5	22.7	16.8	28.1	3.5*	23.5	10.0
DIABETES																	
1980	10.1	9.1	15.2*	8.2	7.2*	13.6*	3.0*	18.7*	NA	8.1	9.5*	23.8	9.3	18.9	3.6*	7.9	16.5
1990	11.7	9.8	15.2*	19.0	13.0	11.3*	8.2*	38.6*	20.5*	8.6	10.4	21.3	8.7	23.2	4.4*	7.8	9.8
INFECTIOUS PARASITIC DISEASES																	
1980	5.8	6.3	-	4.4	5.0*	7.6*	5.8*	-	NA	6.3	3.4*	10.3	7.3	6.4	4.9*	9.7	4.4*
1990[5]	NA	13.5	21.0	28.6	10.7	9.5	3.3*	18.6	15.2*	14.4	5.0	10.5*	14.0	9.6	7.3*	11.8	12.0
HIV Infection																	
1990	9.1	6.4	-	5.2*	2.0*	3.5*	1.3*	18.6*	5.1*	7.9	1.1*	-	6.3	0.9*	-	5.3*	3.3*
ALCOHOLISM																	
1980	NA	11.9	32.7*	11.0	9.8*	22.4	17.0*	27.6*	NA	10.4	9.8*	42.7	12.2	15.8	11.2*	10.0	19.8
1990	NA	8.3	23.0	12.2*	11.3	20.2	13.0*	-	7.7*	6.1	11.0	27.5	10.4	13.2	3.3*	8.8*	7.4*
ALL CAUSES																	
1980	585.8	582.7	694.1	583.2	539.5	613.7	622.1	777.5	NA	572.9	573.5	691.3	584.4	633.5	491.7	584.3	585.6
1990	515.1	524.4	686.7	545.3	479.3	559.9	556.9	548.8	531.8	516.3	562.2	636.1	539.5	595.3	352.9	489.9	428.0
AVERAGE AGE AT DEATH FROM ALL CAUSES																	
1980	NA	65.3	54.4	64.2	56.7	64.3	62.7	58.7	NA	65.8	65.0	56.2	66.9	63.6	67.6	68.7	63.5
1990	NA	68.4	57.7	69.1	58.8	70.5	69.6	65.6	66.5	68.7	68.5	59.8	69.6	66.4	66.2	71.8	68.1

[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.

[2] Leading causes are those with the greatest total number of deaths statewide in 1990.

[3] Provisional.

[4] Included in Yuma County prior to 1983.

[5] Includes data for the category numbers 042-044 (HIV infection) introduced in January 1987 by the National Center for Health Statistics.

- No deaths.

* Less than ten deaths for a specific cause.

TABLE 2-6

AGE ADJUSTED MORTALITY RATES[1] FOR LEADING CAUSES OF DEATH BY ETHNICITY, ARIZONA, 1980 AND 1990

CAUSE OF DEATH	ALL ETHNIC GROUPS[2]	WHITE[3]	HISPANIC	BLACK	NATIVE AMERICAN
DISEASES OF HEART					
1980	180.0	182.4	157.9	242.2	141.3
1990	144.3	146.7	116.2	206.5	129.6
MALIGNANT NEOPLASMS					
1980	122.8	127.1	101.9	151.1	69.2
1990	124.1	128.4	101.8	157.0	80.1
UNINTENTIONAL INJURIES					
1980	52.4	46.9	53.6	50.5	161.6
1990	39.7	35.1	35.6	42.1	130.5
Motor Vehicle-Related					
1980	31.7	28.1	33.7	24.8	96.2
1990	23.8	20.3	22.2	25.4	81.6
Other than Motor Vehicle					
1980	20.7	18.8	19.9	25.6	65.4
1990	15.9	14.9	13.4	16.8	48.9
CEREBROVASCULAR DISEASE					
1980	34.9	35.1	34.7	49.4	21.1
1990	27.4	27.3	22.6	40.7	28.6
CHRONIC OBSTRUCTIVE PULMONARY DISEASE					
1980	27.6	30.0	11.5	22.8	9.2
1990	26.1	28.4	10.3	19.2	8.7
PNEUMONIA AND INFLUENZA					
1980	16.9	15.2	19.9	26.1	53.2
1990	18.8	18.2	13.9	18.5	46.0
SUICIDE					
1980	16.5	17.2	11.1	11.6	20.8
1990	17.7	19.8	8.6	13.1	21.0
DIABETES					
1980	9.1	7.4	14.9	22.3	47.5
1990	9.8	7.4	19.3	17.0	51.1
INFECTIOUS AND PARASITIC DISEASES					
1980	6.3	5.0	5.1	13.7	7.9
1990	13.5	13.3	11.3	25.3	22.7
HIV Infection					
1990	6.4	7.2	4.1	12.4	0.5
ALCOHOLISM					
1980	11.9	7.8	17.7	16.8	78.3
1990	8.3	6.4	7.2	28.5	45.1
HOMICIDE					
1980	10.7	7.6	15.8	44.0	25.2
1990	8.7	5.9	11.6	32.3	19.6
ATHEROSCLEROSIS					
1980	5.5	5.4	7.6	7.3	1.9
1990	3.9	3.9	3.2	3.4	3.6
ALL CAUSES					
1980	582.7	569.0	549.8	810.9	856.2
1990	524.4	517.6	451.3	722.3	835.8

[1] Adjusted to U.S. population of 1940 and presented per 100,000 population.
[2] Includes ethnic groups other than White, Hispanic, Black or Native American.
[3] Not of Hispanic origin.

TABLE 2-7

AVERAGE AGE AT DEATH FROM ALL CAUSES BY GENDER AND ETHNICITY, ARIZONA, 1980-1990

YEAR/GENDER	ALL ETHNIC GROUPS[1]	WHITE[2]	HISPANIC[3]	BLACK	NATIVE AMERICAN
1980, Total	65.3	67.3	56.5	57.2	50.1
MALE	63.1	65.3	53.0	55.2	49.1
FEMALE	68.3	70.1	61.7	60.4	51.7
1981, Total	65.6	67.7	56.3	55.6	48.6
MALE	63.0	65.5	52.6	54.0	46.2
FEMALE	69.0	70.7	62.1	58.3	52.8
1982, Total	66.8	68.7	58.3	59.0	50.3
MALE	64.5	66.6	54.7	57.7	47.7
FEMALE	69.8	71.5	62.7	61.2	54.7
1983, Total	67.1	69.1	58.8	58.2	49.2
MALE	65.0	67.1	56.0	55.7	48.6
FEMALE	70.0	71.6	63.1	62.1	52.2
1984, Total	67.3	69.4	58.3	57.4	50.5
MALE	65.2	67.4	55.7	57.4	48.6
FEMALE	70.1	71.9	62.0	57.4	53.9
1985, Total	67.4	69.3	58.2	58.7	51.1
MALE	64.6	66.7	55.3	55.9	48.7
FEMALE	70.9	72.6	62.6	62.8	55.0
1986, Total	67.1	69.1	57.1	57.3	51.3
MALE	64.3	66.4	54.0	54.4	48.6
FEMALE	70.6	72.3	61.4	61.8	55.6
1987, Total	67.7	69.8	57.8	59.1	49.1
MALE	64.9	67.2	54.1	58.1	45.9
FEMALE	71.2	73.0	63.1	60.4	54.2
1988, Total	67.8	69.9	58.1	57.6	57.0
MALE	65.1	67.5	54.2	55.3	48.3
FEMALE	71.2	73.0	63.7	60.9	55.1
1989, Total	68.2	70.4	57.1	56.9	53.0
MALE	65.3	67.7	54.1	55.7	49.4
FEMALE	71.7	73.6	61.0	58.6	58.4
1990, Total	68.4	70.6	58.5	58.1	51.4
MALE	65.4	67.9	54.6	55.5	48.7
FEMALE	72.2	73.9	64.1	61.6	56.1

[1] Includes ethnic groups other than white, Hispanic, Black or Native American.
[2] Not of Hispanic origin.
[3] White of Hispanic origin.

TABLE 2-8

PERCENT OF DEATHS BEFORE EXPECTED YEARS OF LIFE REACHED[1], BY GENDER AND ETHNICITY, ARIZONA, 1980-1990

YEAR/GENDER	ALL ETHNIC GROUPS[2]	WHITE[3]	HISPANIC	BLACK	NATIVE AMERICAN
1980, Total	58.6	56.2	68.0	73.5	75.9
MALE	64.1	61.9	73.2	77.6	77.1
FEMALE	51.0	48.5	60.2	67.1	73.9
1981, Total	58.1	55.7	67.4	72.4	77.2
MALE	64.2	61.7	74.0	77.7	81.1
FEMALE	49.7	47.6	57.2	62.8	70.4
1982, Total	56.0	53.5	66.3	68.1	75.7
MALE	61.9	59.5	73.3	71.4	79.6
FEMALE	48.1	45.8	57.4	62.4	69.3
1983, Total	58.0	55.6	67.4	71.8	78.5
MALE	63.9	61.7	72.8	78.0	80.1
FEMALE	50.2	48.0	59.4	62.1	75.6
1984, Total	57.3	54.7	67.7	73.7	76.0
MALE	62.8	60.5	73.2	75.1	78.0
FEMALE	50.1	47.5	59.7	71.7	72.5
1985, Total	56.4	53.9	68.1	71.2	74.9
MALE	62.7	60.3	73.9	75.9	77.6
FEMALE	48.3	46.0	59.5	64.5	70.7
1986, Total	56.6	54.2	68.6	69.4	74.5
MALE	63.2	60.9	74.8	74.6	77.6
FEMALE	48.1	45.7	60.0	61.2	69.7
1987, Total	55.6	52.8	68.2	68.6	79.9
MALE	62.2	59.5	75.3	71.3	83.9
FEMALE	47.2	44.5	58.7	64.7	73.6
1988, Total	54.7	51.9	67.0	67.5	77.9
MALE	61.2	58.4	73.4	72.6	82.5
FEMALE	46.4	43.8	57.8	60.5	70.9
1989, Total	54.0	51.0	67.8	71.7	74.4
MALE	61.0	58.1	73.6	75.2	79.7
FEMALE	45.6	42.6	60.0	67.0	66.7
1990, Total	53.1	50.1	66.1	68.8	75.4
MALE	60.0	57.0	73.8	74.3	78.3
FEMALE	44.5	42.0	54.7	61.1	70.4

[1] Based on expected years of life at birth in each year or life expectancy for all U.S. residents, U.S. Dept. of Health and Human Services: Health United States and Prevention Profile 1990, Table 15.

[2] Includes ethnic groups other than white, Hispanic, Black or Native American.

[3] Not of Hispanic origin.

TABLE 2-9

AVERAGE AGE AT DEATH FOR THOSE WHO DIED BEFORE EXPECTED YEARS OF LIFE REACHED[1], BY GENDER AND ETHNICITY, ARIZONA, 1980-1990

Year/Gender	All Ethnic Groups[2]	White[3]	Hispanic	Black	Native American
1980, Total	53.3	55.7	44.3	48.1	39.2
MALE	52.9	55.5	42.3	47.5	38.6
FEMALE	54.0	56.0	47.9	49.2	40.3
1981, Total	53.5	56.1	43.8	45.0	38.2
MALE	52.8	55.6	42.4	46.0	37.6
FEMALE	54.6	57.0	46.6	42.8	39.4
1982, Total	54.4	56.8	46.0	48.0	39.4
MALE	54.0	56.5	44.9	48.2	38.3
FEMALE	55.2	57.3	47.8	47.6	41.4
1983, Total	55.6	57.9	47.0	48.5	40.2
MALE	55.3	57.8	45.9	48.5	39.7
FEMALE	56.1	58.2	48.9	48.5	41.2
1984, Total	55.5	58.0	46.4	48.3	39.6
MALE	55.1	57.8	45.9	49.2	38.4
FEMALE	56.1	58.5	47.2	47.0	41.8
1985, Total	55.2	57.5	46.6	48.8	40.1
MALE	54.3	56.7	45.8	47.3	38.7
FEMALE	56.7	58.8	47.8	51.0	42.3
1986, Total	54.7	57.2	45.2	45.5	39.8
MALE	53.9	56.5	44.6	44.5	38.1
FEMALE	56.0	58.3	46.2	47.5	42.7
1987, Total	55.2	57.7	46.1	47.9	40.3
MALE	54.4	57.1	44.8	48.0	38.7
FEMALE	56.5	58.7	48.4	47.7	43.3
1988, Total	54.9	57.5	45.5	45.5	41.5
MALE	54.2	57.0	43.9	45.4	40.8
FEMALE	56.0	58.3	48.5	45.7	42.9
1989, Total	55.2	57.9	44.8	46.6	42.3
MALE	54.4	57.2	44.2	46.8	40.5
FEMALE	56.6	59.2	45.9	46.3	45.5
1990, Total	55.2	57.9	45.7	46.6	40.8
MALE	54.2	57.1	44.8	46.2	39.0
FEMALE	57.0	59.4	47.5	47.3	44.5

[1] Based on expected years of life at birth in each year or life expectancy for all U.S. residents, U.S. Dept. of Health and Human Services: Health United States and Prevention Profile 1990, Table 15.

[2] Includes ethnic groups other than white, Hispanic, Black or Native American.

[3] Not of Hispanic origin.

TABLE 2-10

AVERAGE AGE AT DEATH AND PERCENT DEATHS BEFORE EXPECTED YEARS OF LIFE REACHED[1] FOR THE TEN LEADING CAUSES OF MORTALITY BY GENDER, ETHNICITY AND AREA, ARIZONA, 1990

CAUSE OF DEATH	STATEWIDE			URBAN[2]		RURAL		WHITE[3]		HISPANIC		BLACK		NATIVE AMERICAN	
	Both Genders	M	F	M	F	M	F	M	F	M	F	M	F	M	F
DISEASES OF HEART															
Average age	75.3	72.5	78.7	72.8	79.0	71.6	77.3	72.9	79.2	70.2	76.0	68.5	71.6	66.8	68.3
% deaths below LE[4]	41.9	52.0	30.2	50.7	28.5	55.9	37.0	51.0	28.6	56.9	36.6	63.8	53.1	61.5	58.0
MALIGNANT NEOPLASMS															
Average age	69.6	69.7	69.4	69.7	69.6	69.8	68.7	70.2	69.8	65.0	66.4	68.3	67.5	64.3	65.1
% deaths below LE	61.6	61.7	61.4	61.1	60.2	63.8	65.9	60.6	60.9	72.4	58.9	67.4	64.0	66.7	69.4
UNINTENTIONAL INJURIES															
Average age	42.0	38.9	49.4	39.5	51.1	37.7	44.1	41.6	55.1	34.1	37.3	36.3	35.8	33.7	33.3
% deaths below LE	85.5	89.7	75.7	88.4	73.1	92.3	83.3	86.7	69.9	95.4	86.5	85.7	94.1	96.2	91.2
MOTOR VEHICLE															
Average age	37.3	35.2	41.8	35.0	43.4	35.6	37.8	37.3	47.9	30.2	30.5	35.1	36.5	32.9	28.3
% deaths below LE	92.5	94.5	88.1	93.3	85.9	96.7	93.5	92.2	82.6	99.1	100.0	86.7	100.0	99.1	97.5
OTHER INJURY															
Average age	48.2	43.6	60.2	44.6	60.9	41.0	57.3	46.3	63.8	40.6	54.2	37.8	34.9	34.9	45.3
% deaths below LE	76.5	83.7	57.8	82.9	56.7	85.7	62.2	80.9	54.4	89.6	53.3	84.0	85.7	91.7	76.5
CEREBROVASCULAR DISEASE															
Average Age	78.0	76.3	79.1	76.4	79.5	76.1	77.5	77.3	79.7	71.0	76.1	76.4	74.7	66.6	64.7
% deaths below LE	30.4	35.6	26.7	35.3	25.6	36.3	32.0	33.1	25.2	54.2	35.8	35.3	40.9	34.2	50.0
CHRONIC OBSTRUCTIVE PULMONARY DISEASE															
Average age	73.7	73.5	74.0	73.5	74.5	73.4	71.9	73.6	74.2	70.9	75.9	67.3	64.8	80.3	64.4
% deaths below LE	48.8	49.6	47.9	49.7	46.8	49.2	52.2	49.5	47.7	56.7	36.4	58.3	80.0	16.7	57.1
INFLUENZA AND PNEUMONIA															
Average age	78.3	76.6	80.1	76.6	80.8	76.7	77.1	77.9	81.4	69.3	68.7	71.9	74.0	71.1	72.3
% deaths below LE	27.7	32.6	22.6	31.5	20.5	35.7	31.1	30.7	18.8	41.5	51.5	25.0	30.0	43.9	51.9
SUICIDE															
Average age	44.7	44.1	47.5	42.2	47.9	49.1	49.5	46.1	49.9	38.7	33.1	32.2	29.8	29.3	40.5
% deaths below LE	89.3	89.5	88.2	92.1	87.0	82.7	94.7	88.3	86.1	93.2	100.0	100.0	100.0	97.4	100.0
DIABETES															
Average age	70.2	67.5	72.9	67.4	73.2	67.6	72.1	68.4	75.1	67.4	69.5	64.6	69.0	63.9	67.6
% deaths below LE	57.7	69.1	46.7	70.9	44.1	65.1	53.1	64.4	41.2	78.7	51.0	100.0	44.4	72.2	68.6
INFECTIOUS PARASITIC DISEASES[5]															
Average age	54.4	50.0	64.9	49.5	66.4	53.6	60.8	51.4	68.5	43.0	53.1	43.3	48.7	48.1	60.2
% deaths below LE	75.4	82.3	59.0	82.7	57.4	80.0	63.3	80.4	56.4	95.7	65.0	90.0	66.7	77.8	64.7
HIV Infection															
Average age	38.0	38.1	35.4	37.8	35.4	41.9	-	38.7	35.2	35.2	36.0	35.8	-	29.0	-
% deaths below LE	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	-
ALCOHOLISM															
Average age	54.2	54.1	54.5	53.8	56.5	54.7	49.9	57.8	57.1	50.2	56.8	51.1	47.0	45.9	46.3
% deaths below LE	91.5	91.6	91.2	92.5	88.9	89.7	96.4	87.8	89.2	93.9	100.0	100.0	100.0	100.0	95.2
TOTAL, ALL CAUSES															
Average age	68.4	65.4	72.2	65.7	72.6	64.7	70.3	67.9	73.9	54.6	64.1	55.5	61.6	48.7	56.1
% deaths below LE	53.1	60.0	44.5	59.1	42.9	62.8	50.7	57.0	42.0	73.8	54.7	74.3	61.1	78.3	70.4

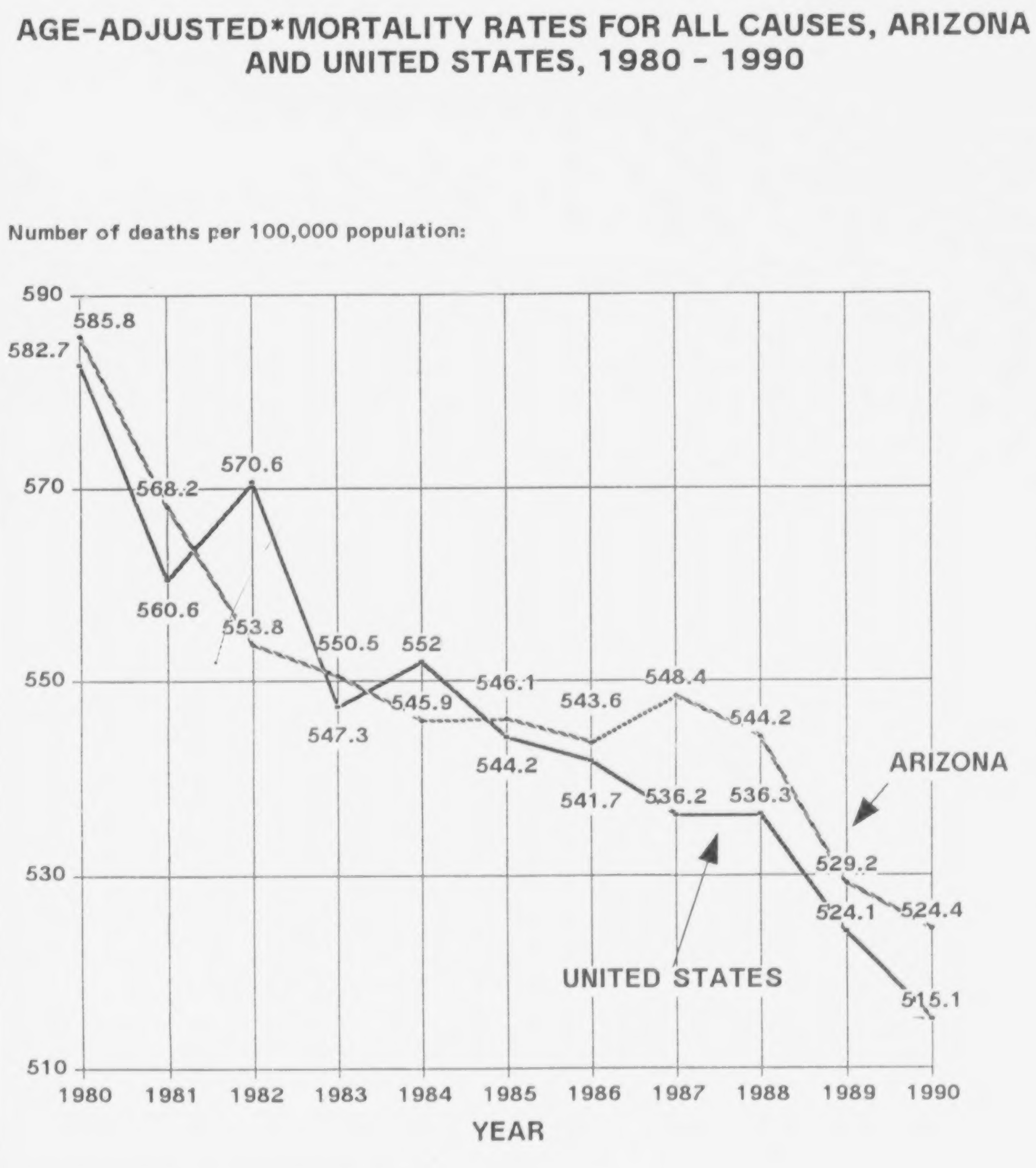
[1] Based on expected years of life at birth in each year or life expectancy (LE) for all U.S. residents, U.S. Dept. of Health and Human Services: Health United States and Prevention Profile 1990, Table 15.

[2] Maricopa, Pima and Yuma counties.

[3] Not of Hispanic origin.

[4] Includes data for the category numbers 042-044 (HIV infection).

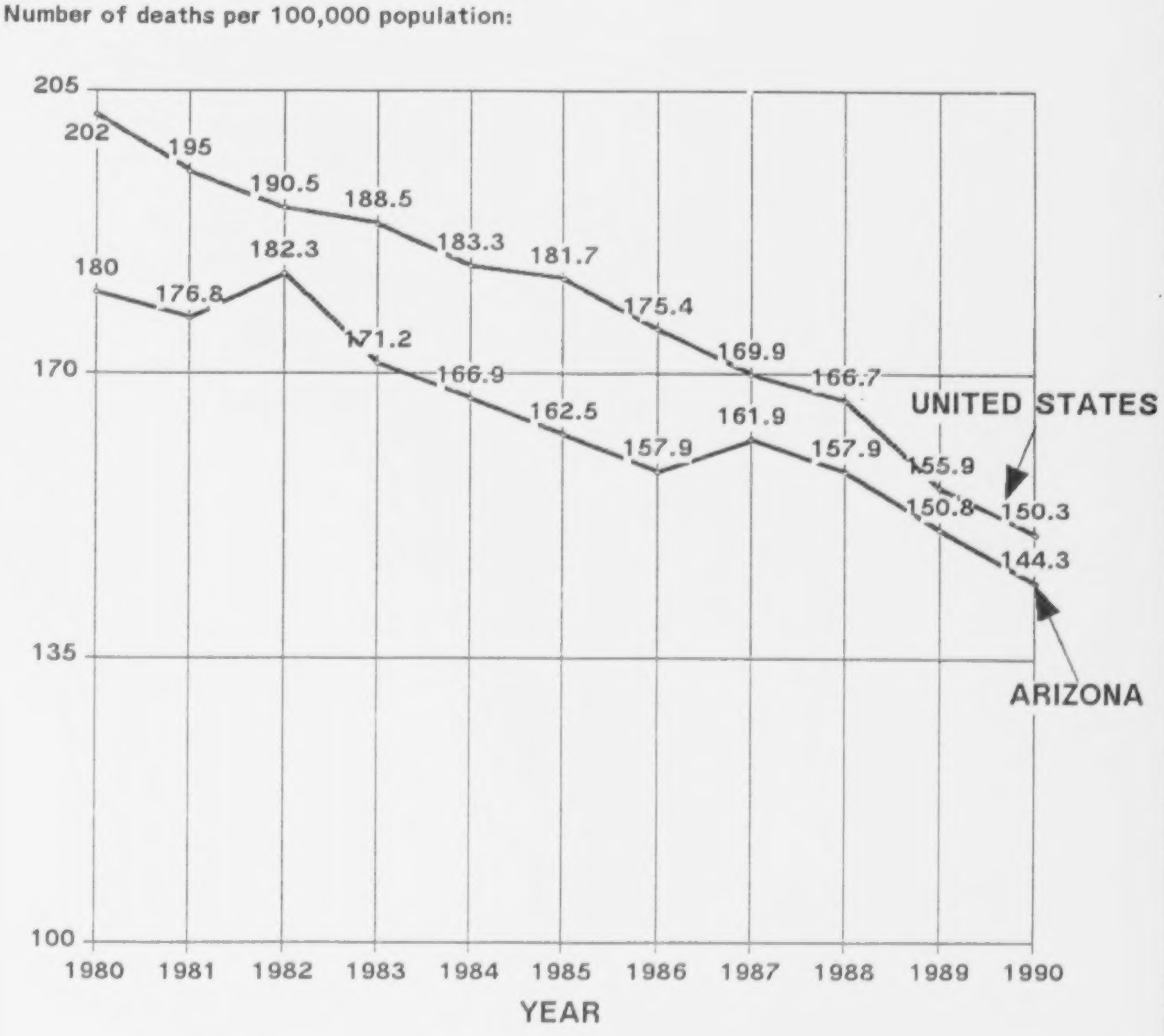
FIGURE 8.



*Adjusted to U.S.population of 1940.

FIGURE 9.

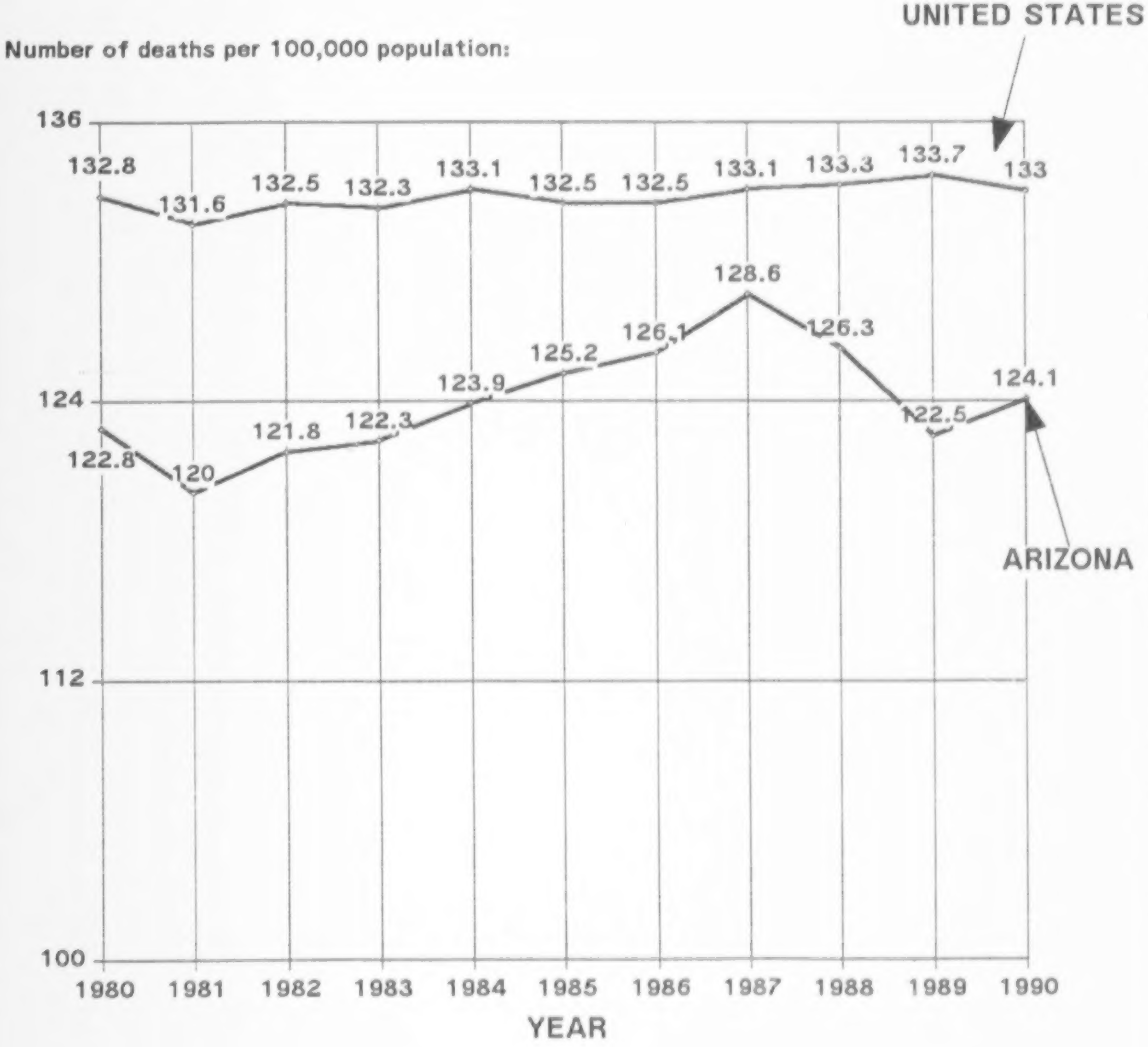
AGE-ADJUSTED* MORTALITY RATES FOR DISEASES OF HEART, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 10.

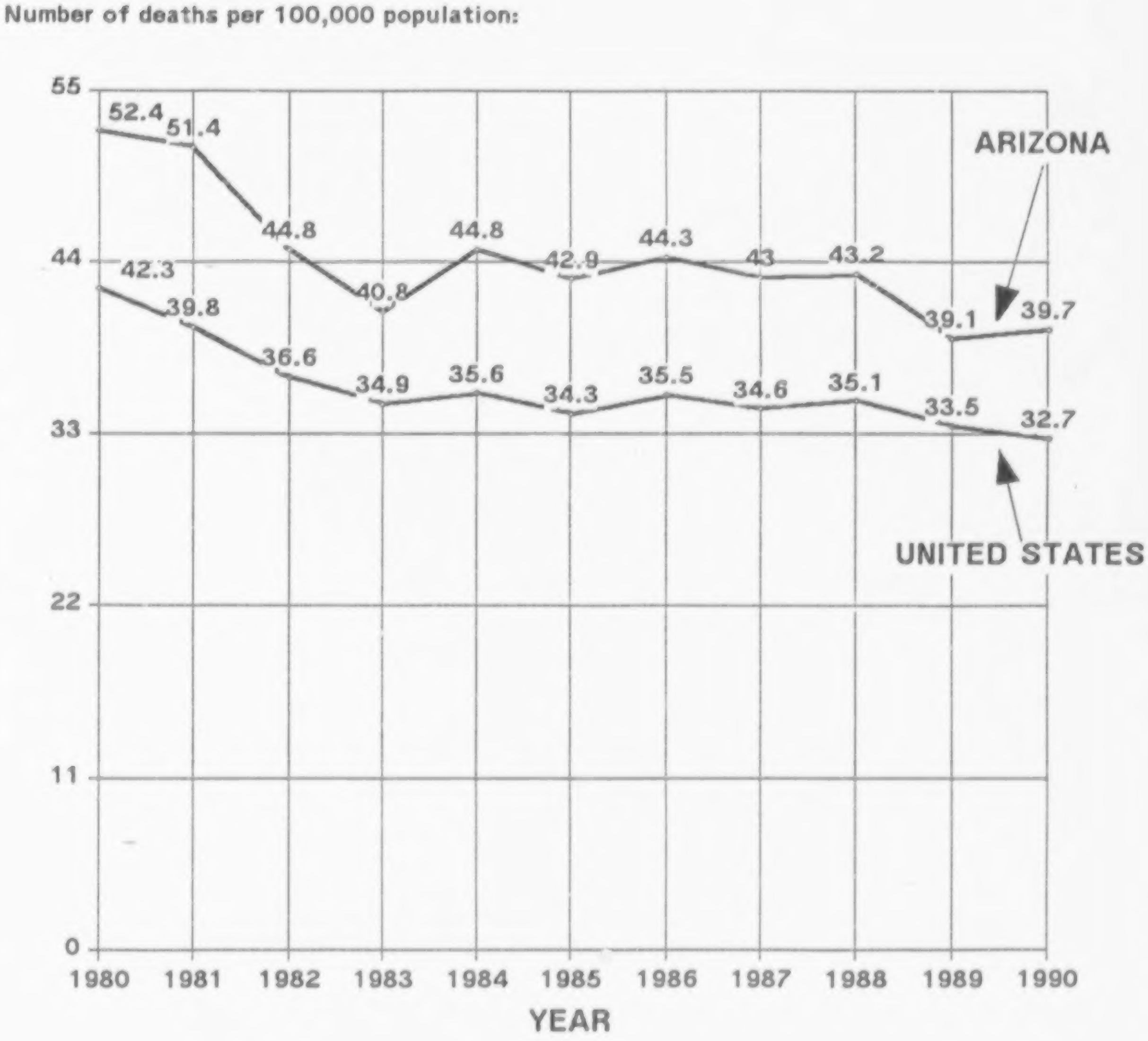
AGE-ADJUSTED* MORTALITY RATES FOR MALIGNANT NEOPLASMS, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 11.

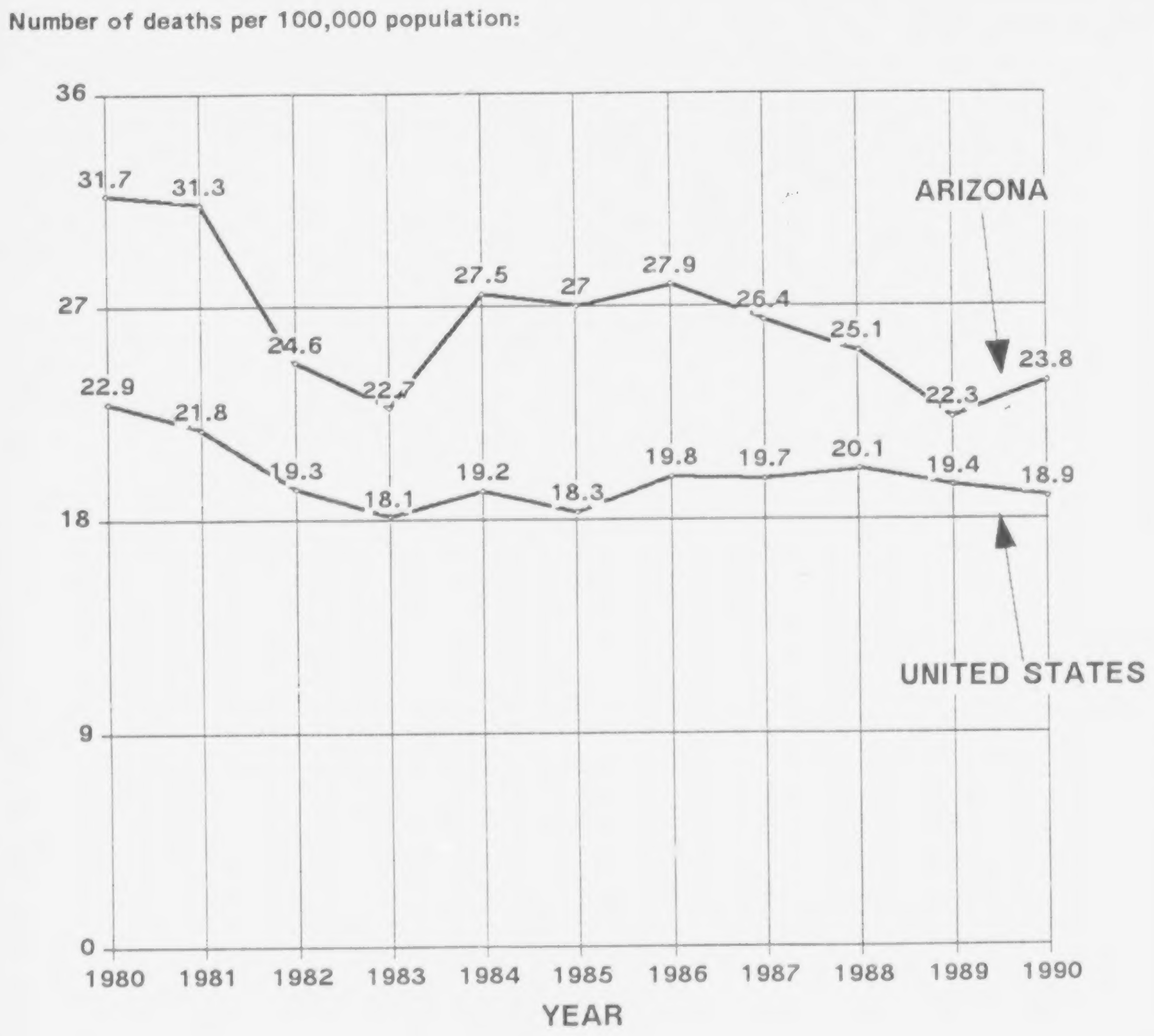
AGE-ADJUSTED* MORTALITY RATES FOR UNINTENTIONAL INJURIES, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 12.

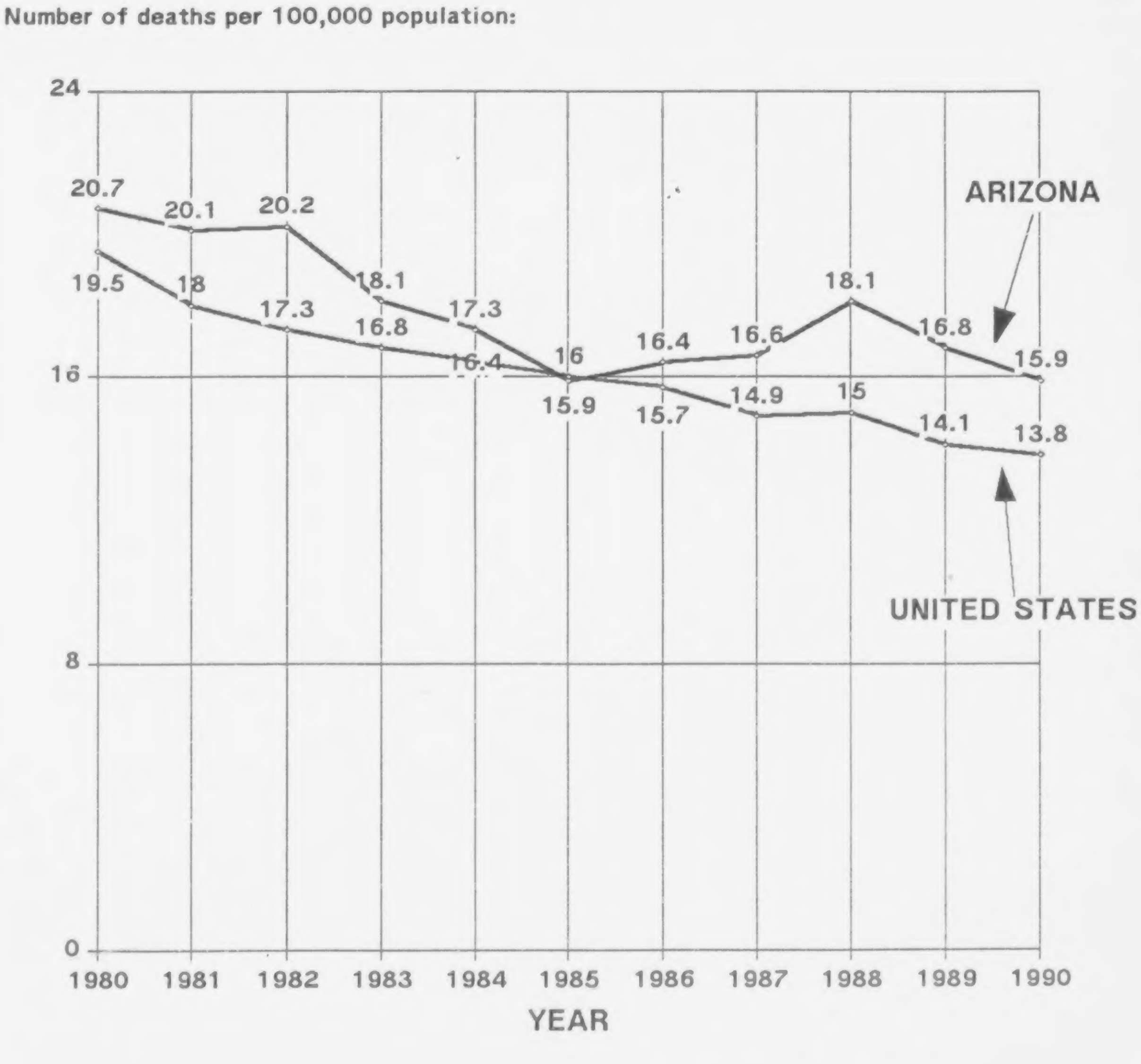
AGE-ADJUSTED* MORTALITY RATES FOR MOTOR VEHICLE-RELATED INJURIES, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 13.

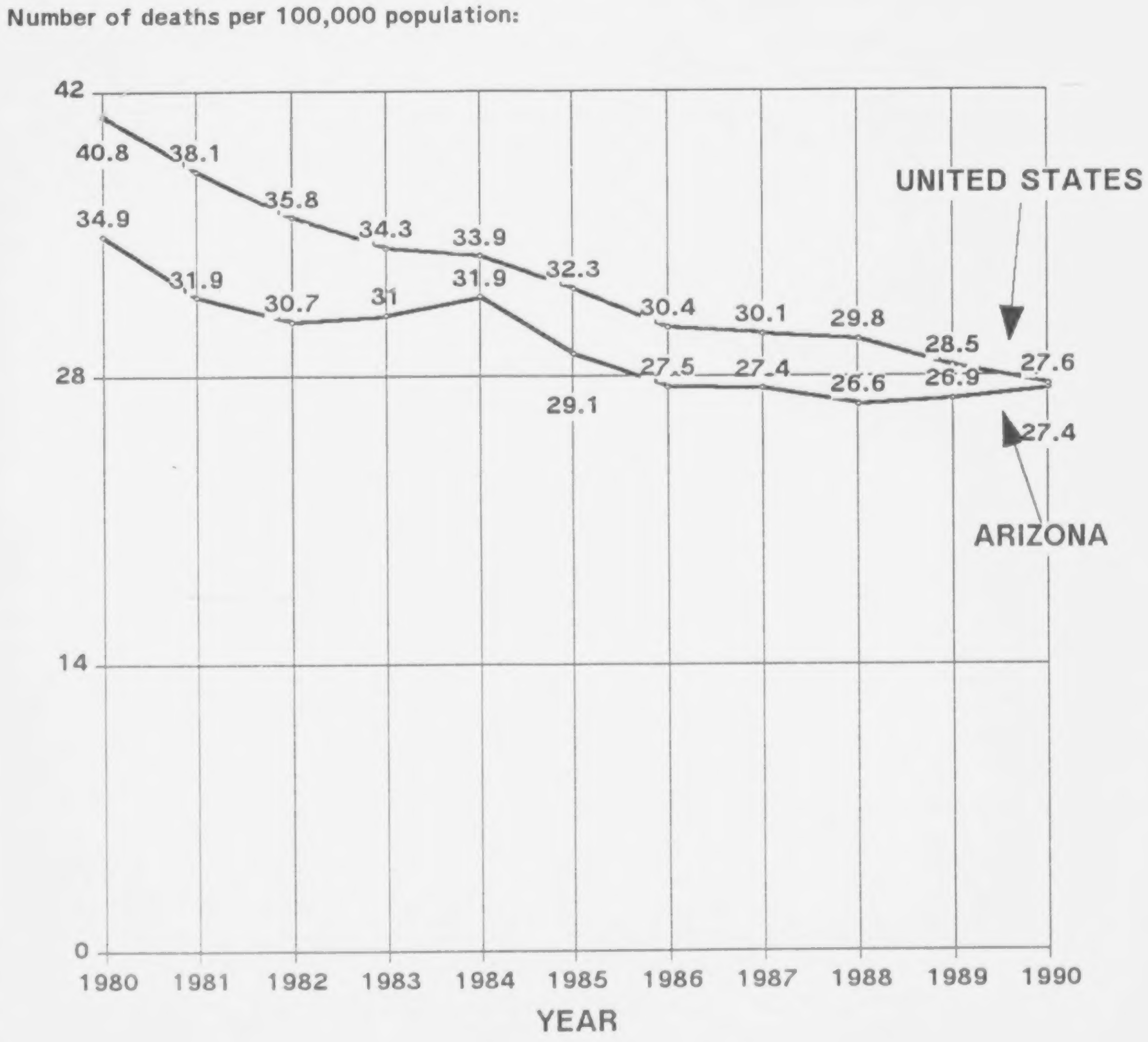
AGE-ADJUSTED* MORTALITY RATES FOR INJURIES NOT RELATED TO MOTOR VEHICLES, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 14.

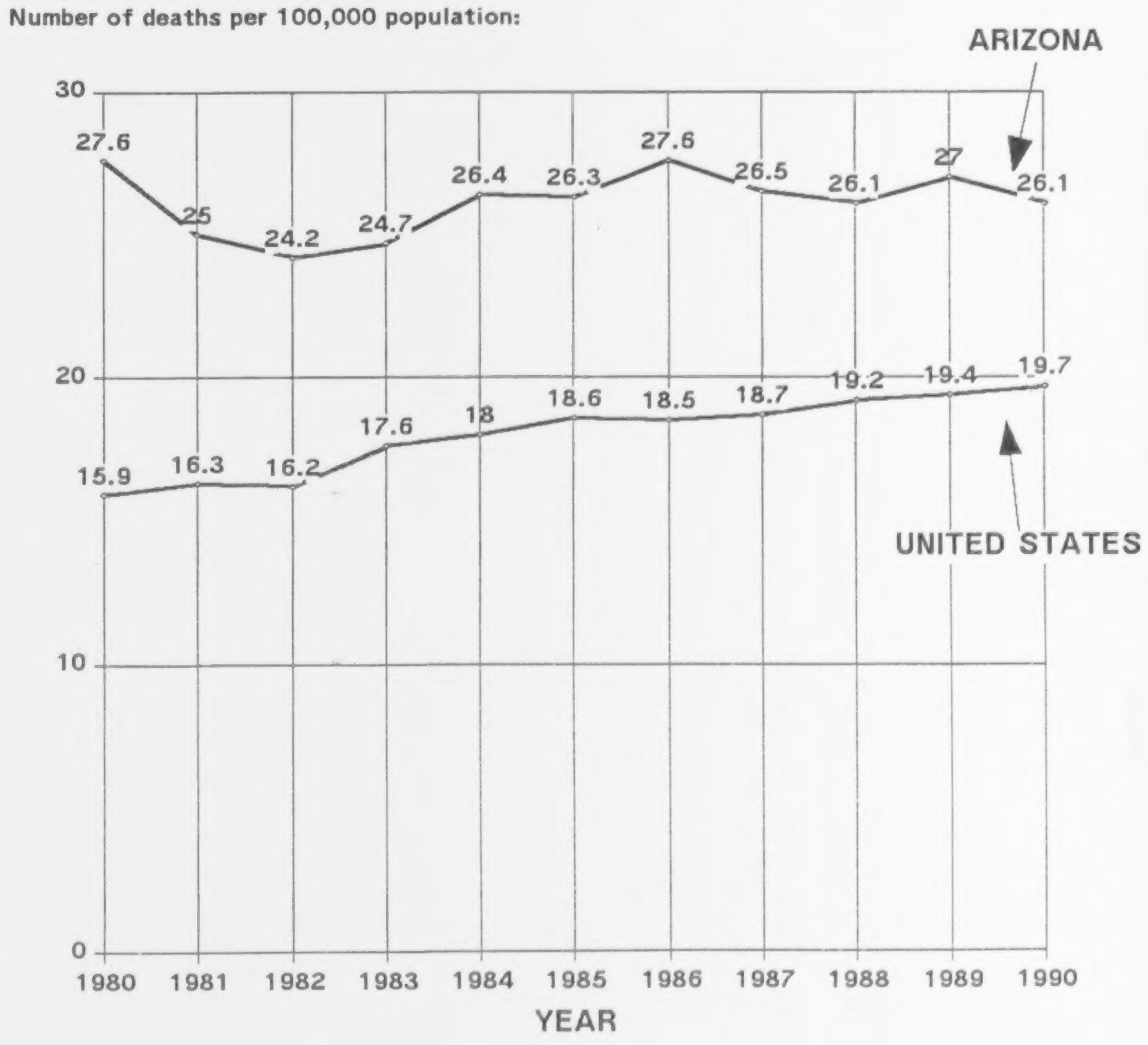
AGE-ADJUSTED* MORTALITY RATES FOR CEREBROVASCULAR DISEASE, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 15.

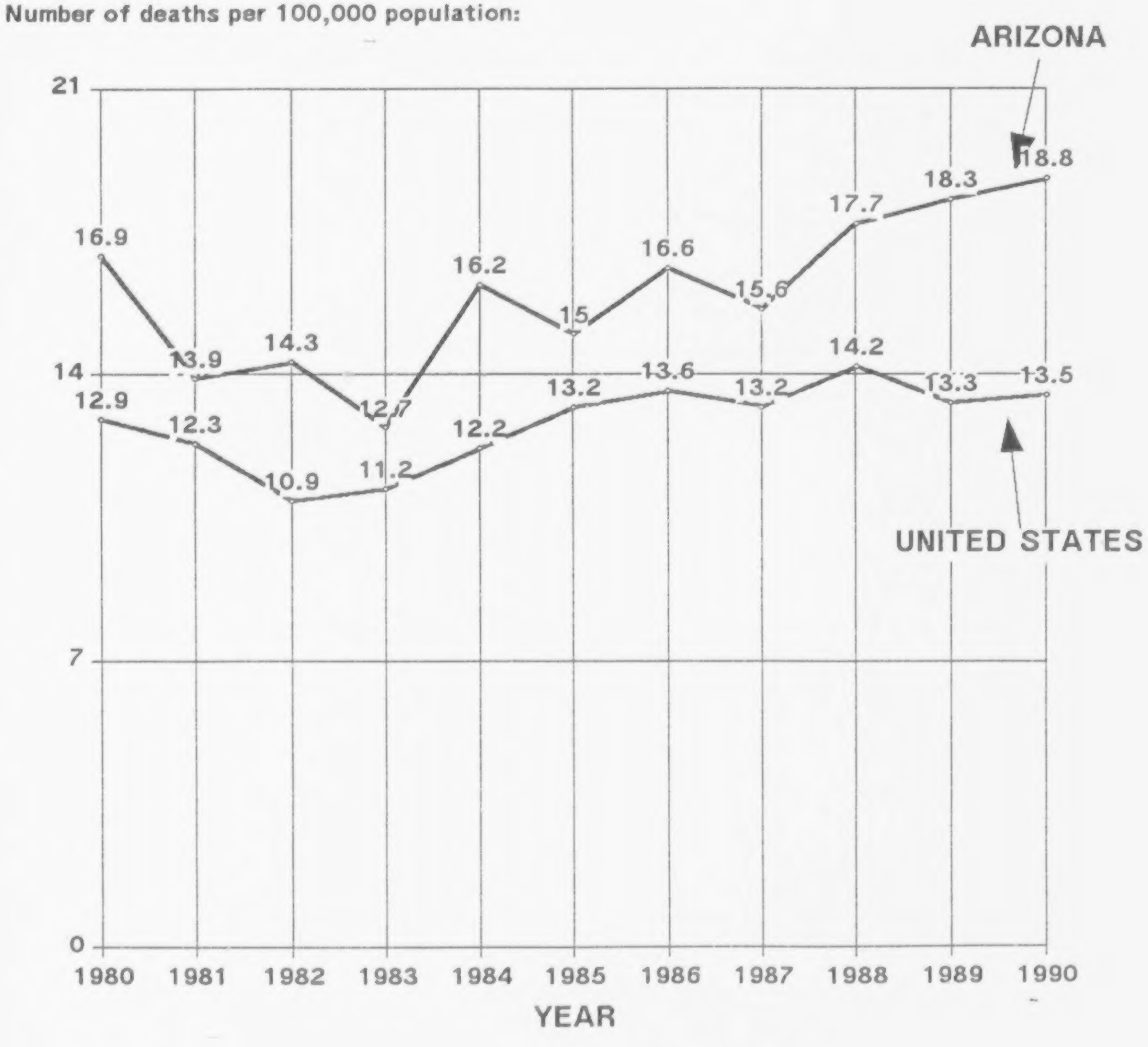
AGE-ADJUSTED* MORTALITY RATES FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 16.

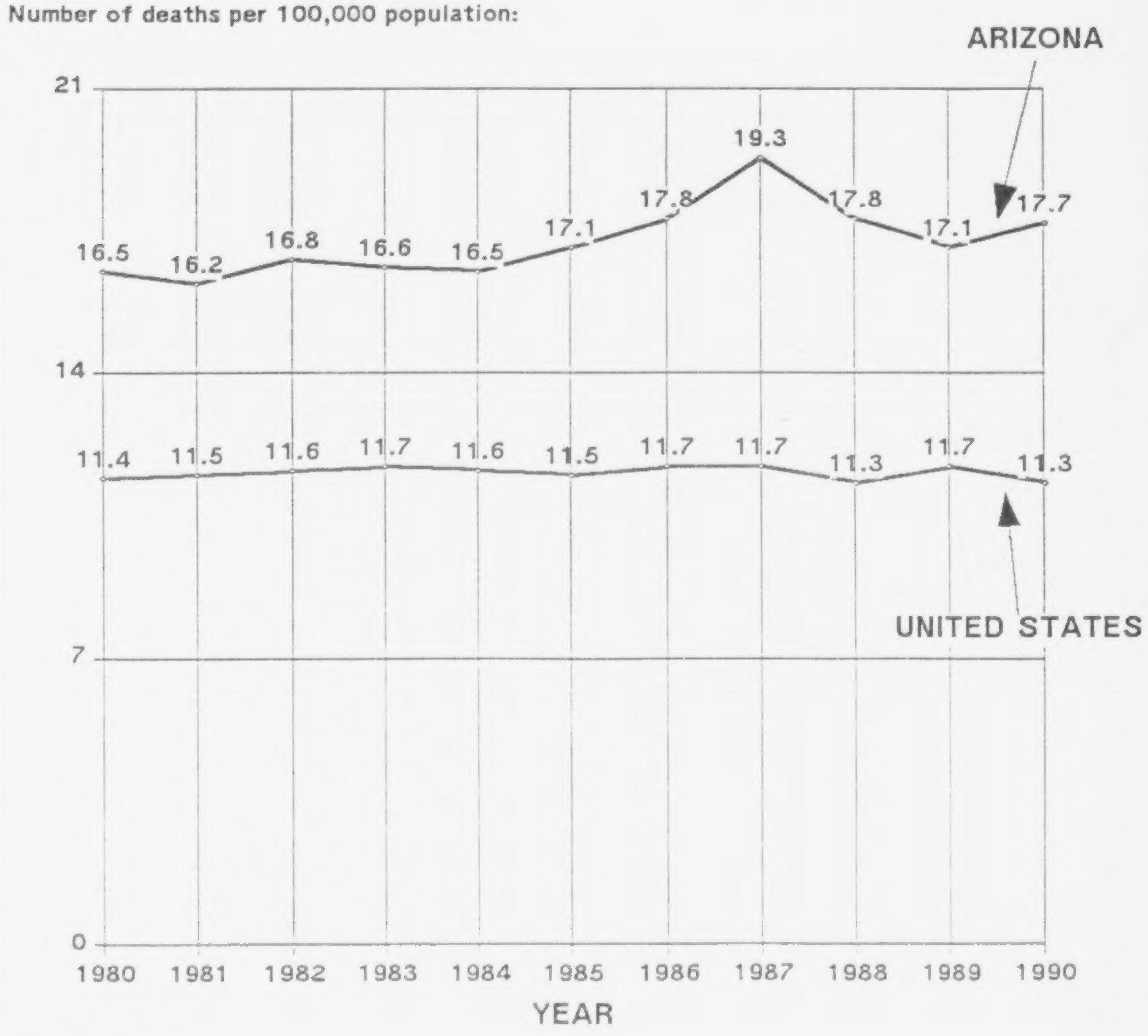
AGE-ADJUSTED* MORTALITY RATES FOR PNEUMONIA AND INFLUENZA, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 17.

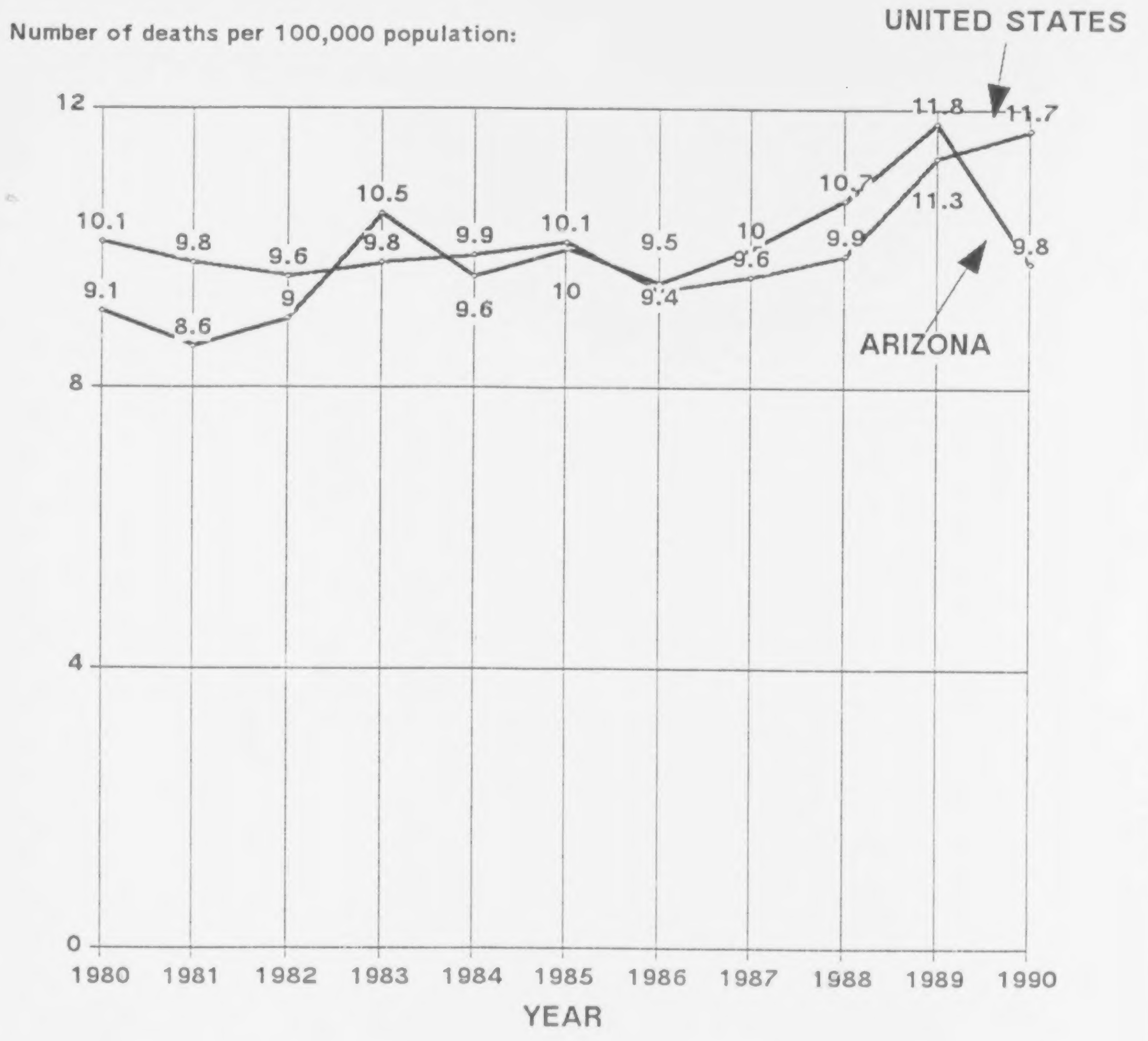
AGE-ADJUSTED* MORTALITY RATES FOR SUICIDE, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 18.

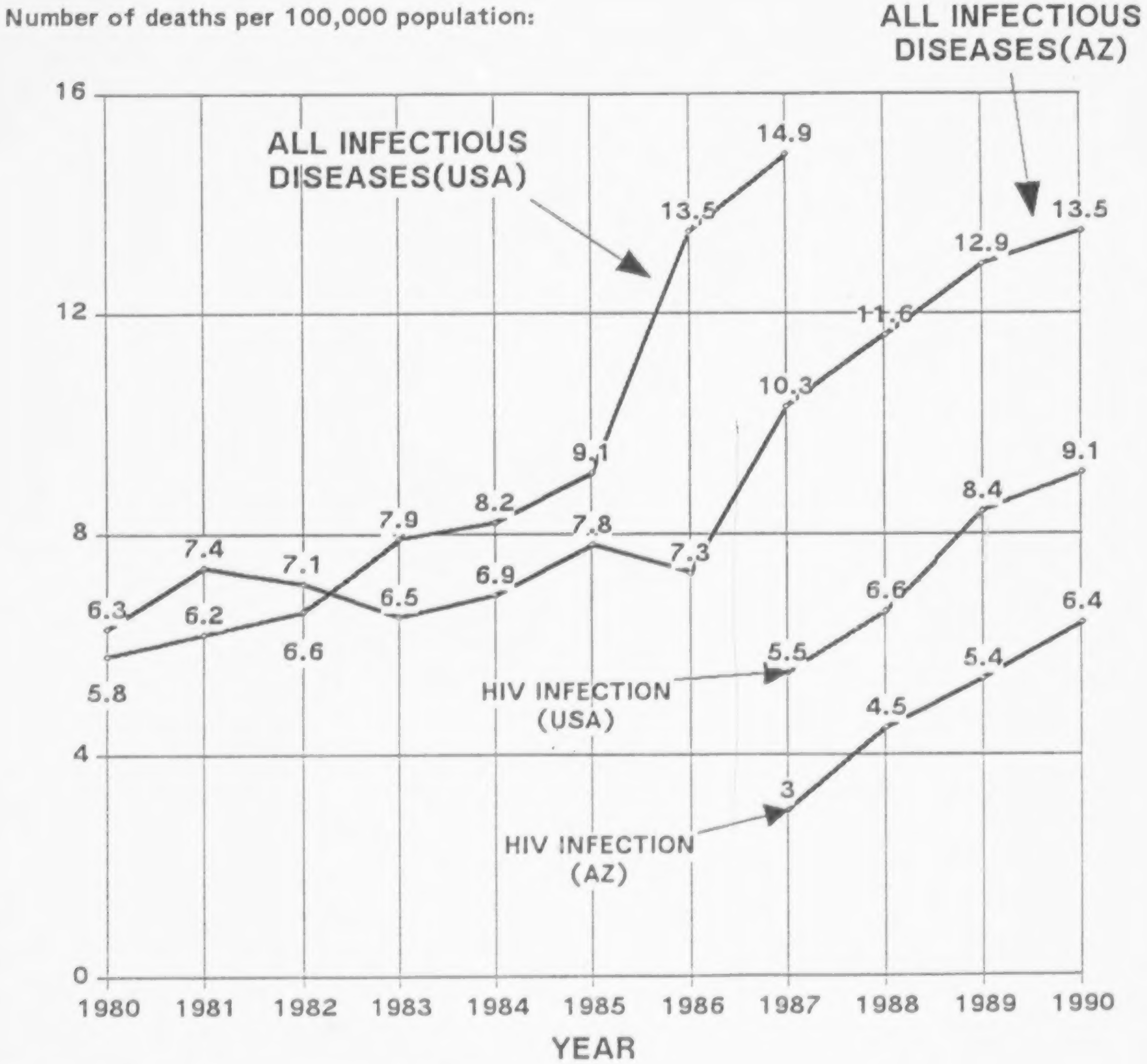
AGE-ADJUSTED* MORTALITY RATES FOR DIABETES, ARIZONA AND UNITED STATES, 1980 - 1990



*Adjusted to U.S.population of 1940.

FIGURE 19.

AGE-ADJUSTED* MORTALITY RATES FOR ALL INFECTIOUS DISEASES** (1980-1990) AND FOR HIV INFECTION FROM 1987 TO 1990, ARIZONA AND UNITED STATES



*Adjusted to U.S.population of 1940.

**Beginning in January 1987, total for all infectious diseases includes data for the category numbers 042-044 (HIV infection), following the redefinition by the National Center for Health Statistics.The U.S. rates are not available for 1989 and 1990.

FIGURE 20.

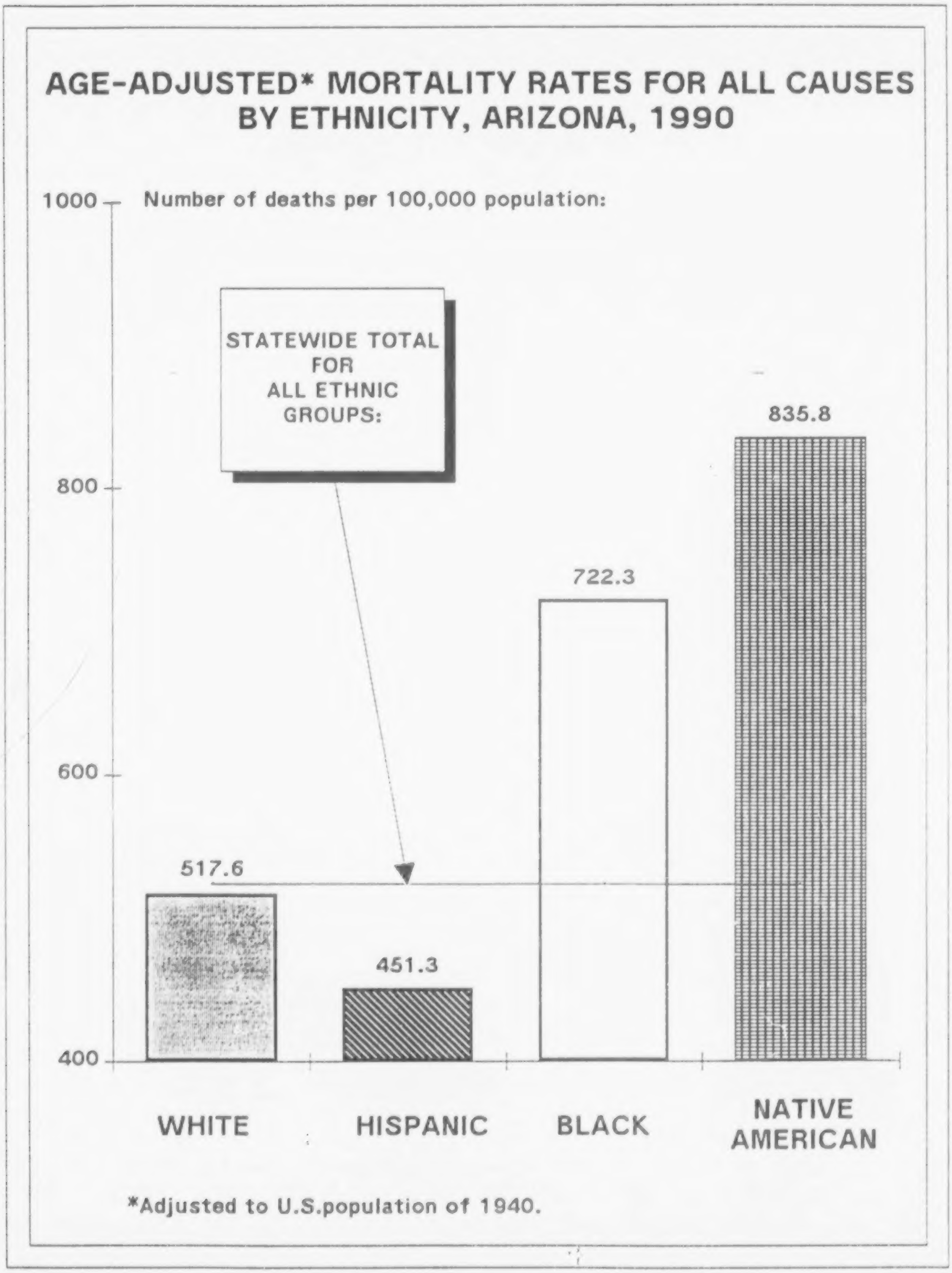

AGE-ADJUSTED* MORTALITY RATES FOR ALL CAUSES BY ETHNICITY, ARIZONA, 1990
Number of deaths per 100,000 population:
1000
800
600
400
STATEWIDE TOTAL FOR ALL ETHNIC GROUPS:
517.6
451.3
722.3
835.8
WHITE
HISPANIC
BLACK
NATIVE AMERICAN
*Adjusted to U.S.population of 1940.

FIGURE 21.

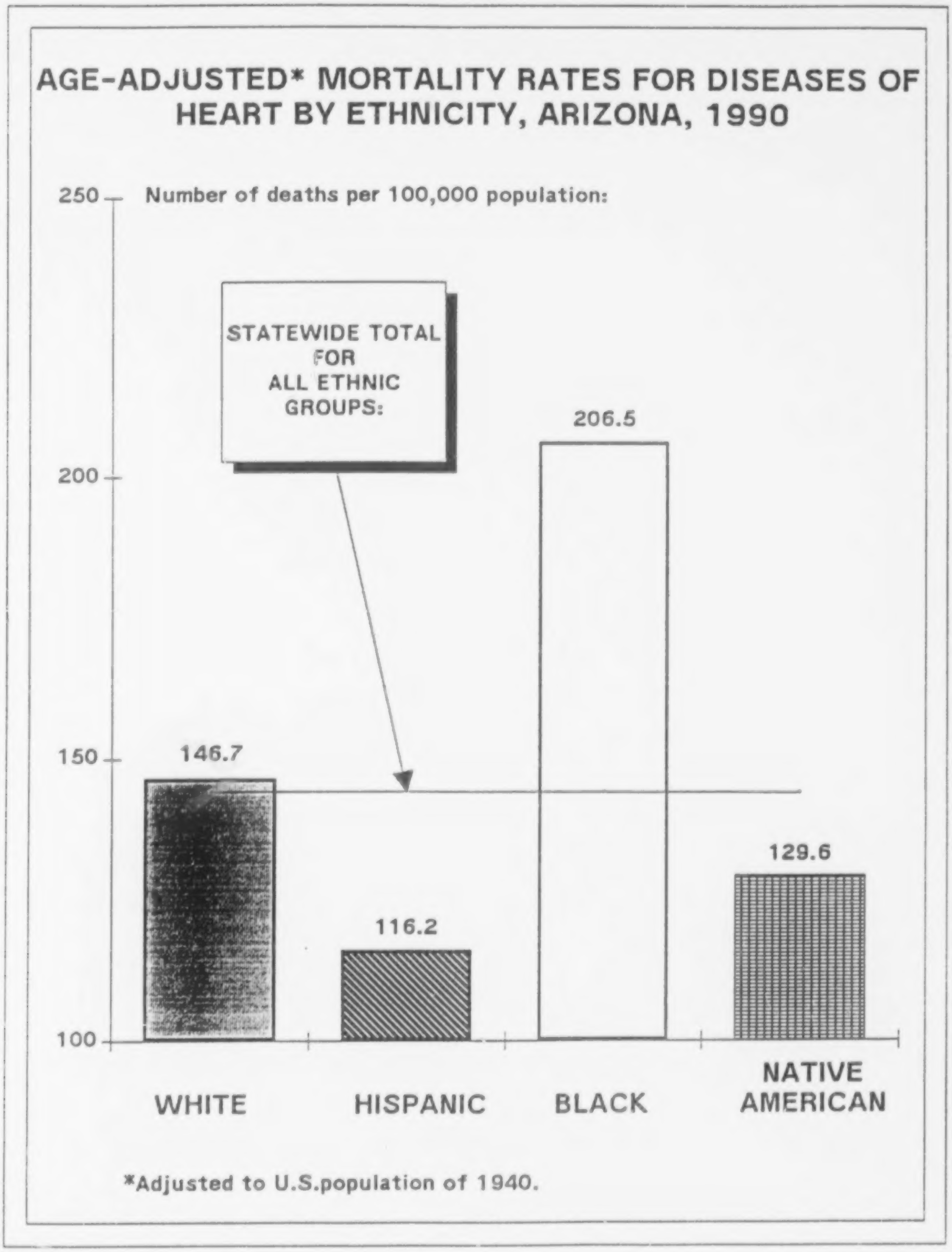
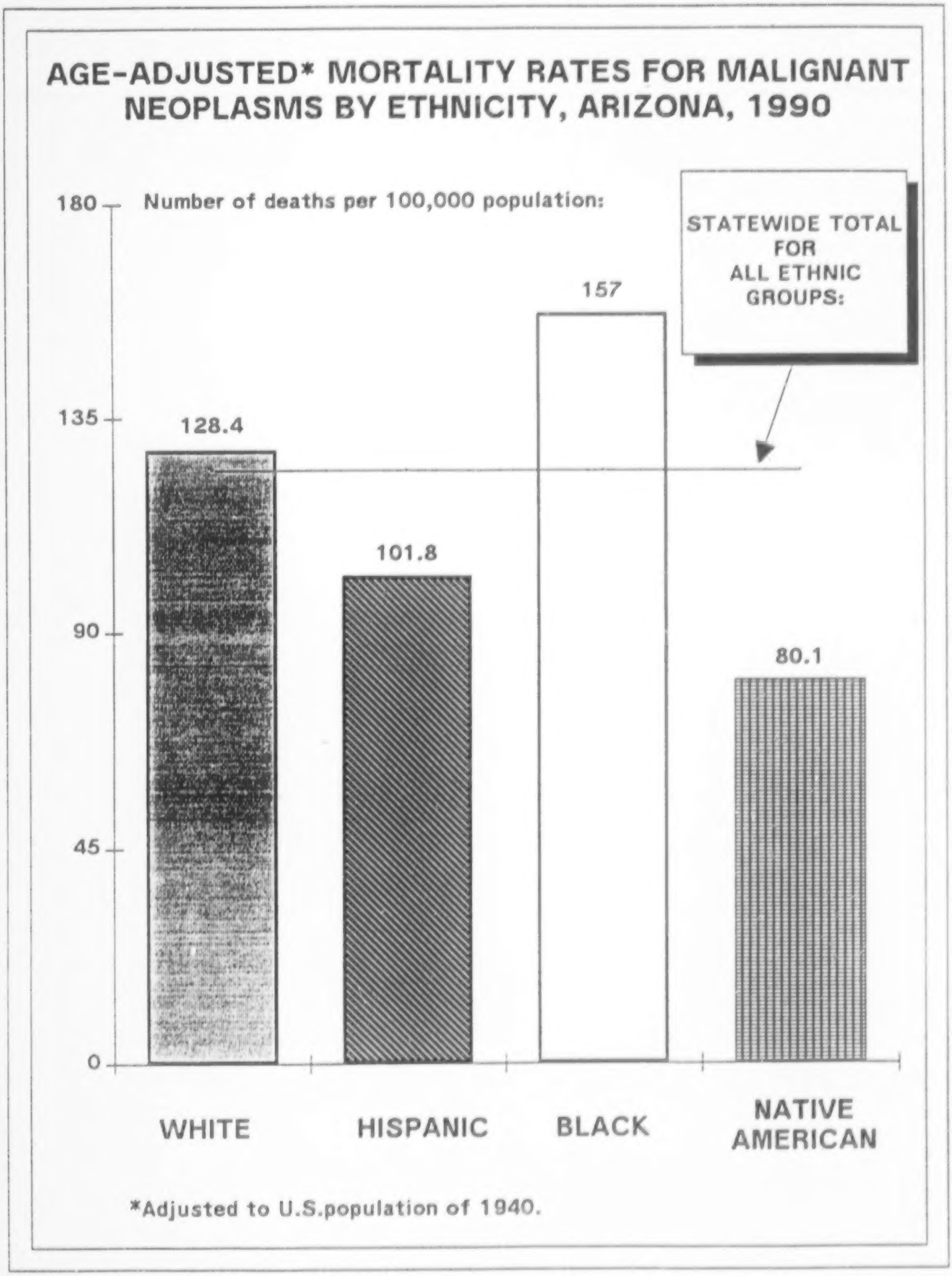

AGE-ADJUSTED* MORTALITY RATES FOR DISEASES OF HEART BY ETHNICITY, ARIZONA, 1990
Number of deaths per 100,000 population:
250
200
150
100
STATEWIDE TOTAL FOR ALL ETHNIC GROUPS:
146.7
116.2
206.5
129.6
WHITE
HISPANIC
BLACK
NATIVE AMERICAN
*Adjusted to U.S.population of 1940.

FIGURE 22.



AGE-ADJUSTED* MORTALITY RATES FOR MALIGNANT NEOPLASMS BY ETHNICITY, ARIZONA, 1990

*Adjusted to U.S.population of 1940.

FIGURE 23.

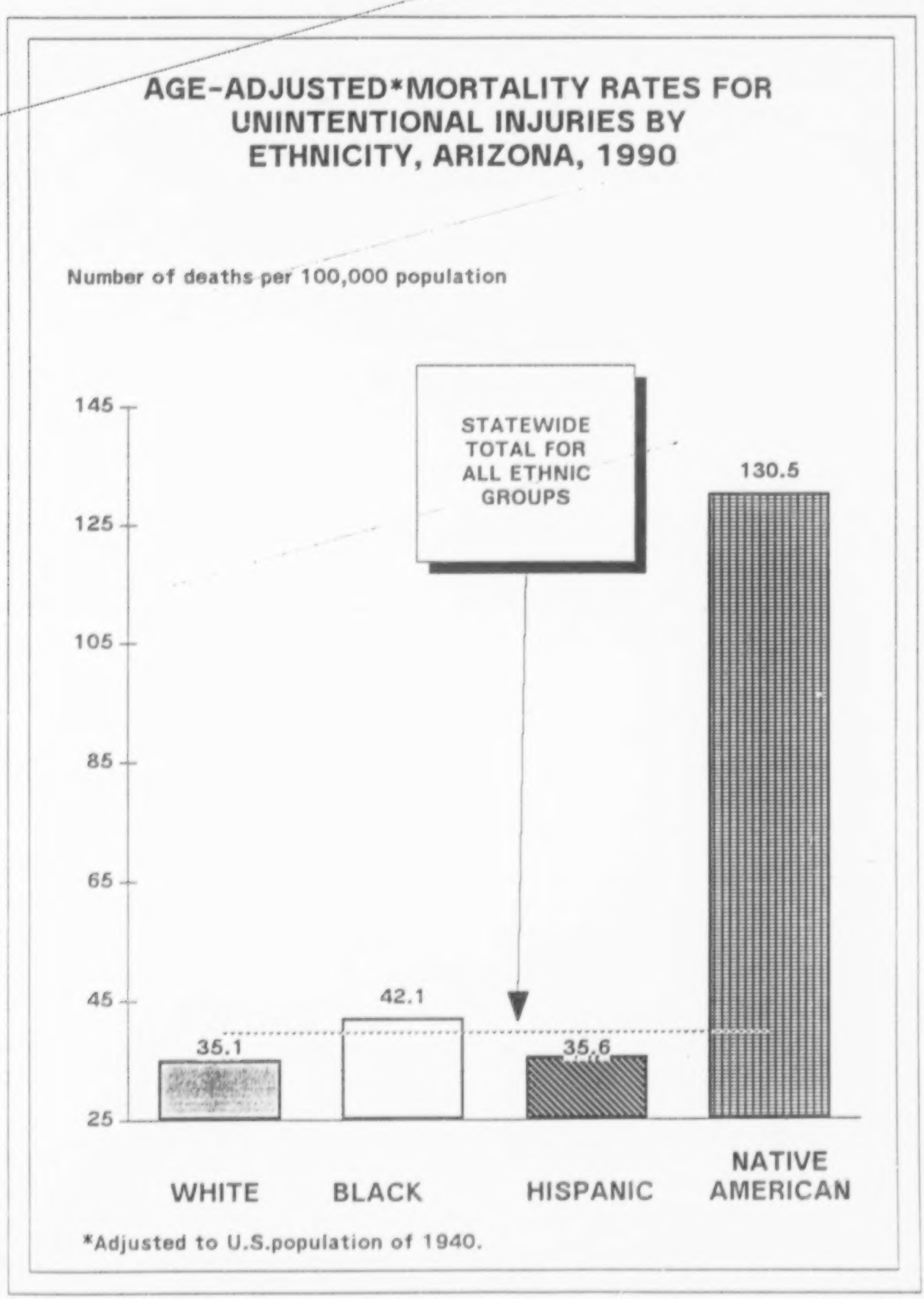
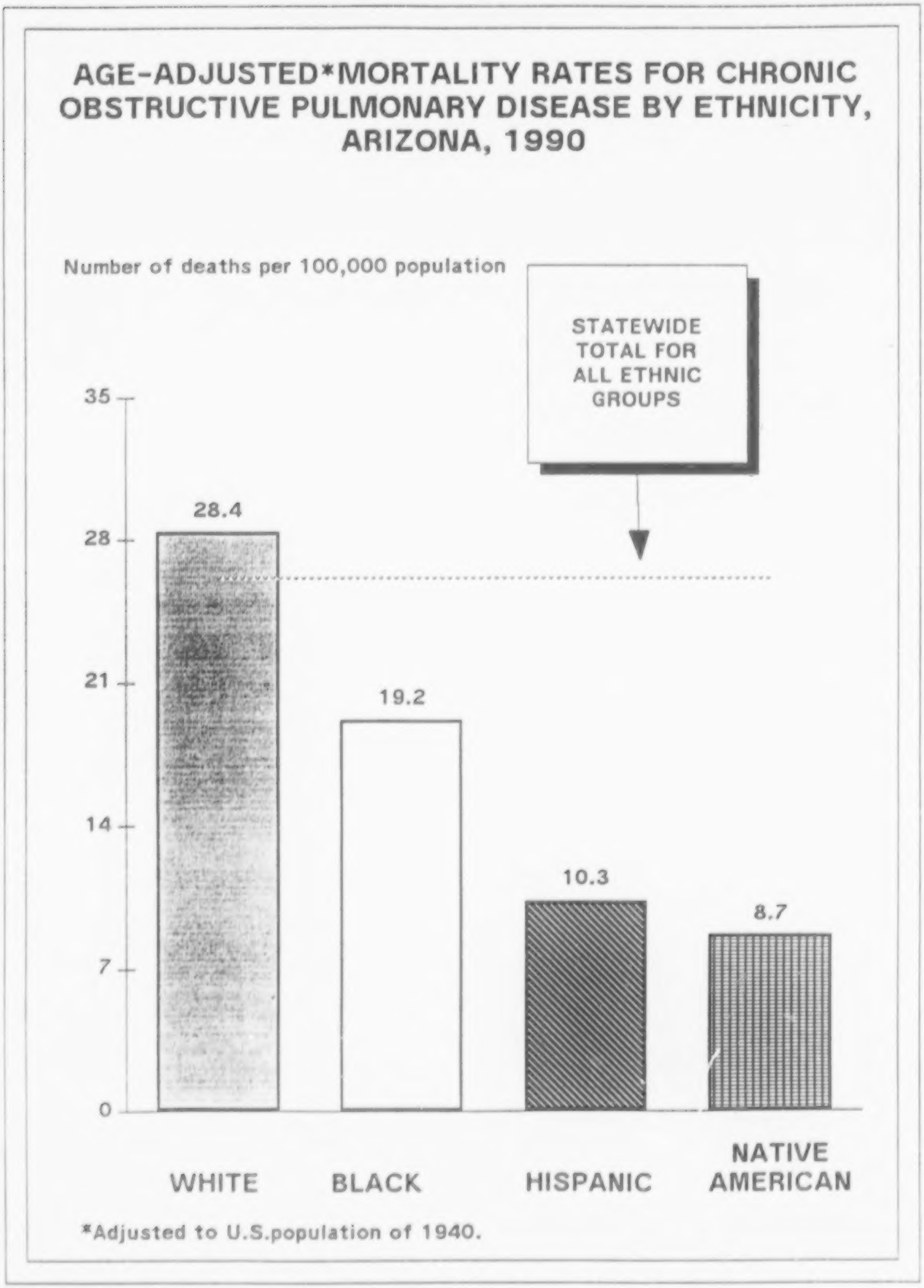

AGE-ADJUSTED*MORTALITY RATES FOR UNINTENTIONAL INJURIES BY ETHNICITY, ARIZONA, 1990
Number of deaths per 100,000 population
145
125
105
85
65
45
25
STATEWIDE TOTAL FOR ALL ETHNIC GROUPS
35.1
42.1
35.6
130.5
WHITE
BLACK
HISPANIC
NATIVE AMERICAN
*Adjusted to U.S.population of 1940.

FIGURE 24.



*Adjusted to U.S.population of 1940.

FIGURE 25.

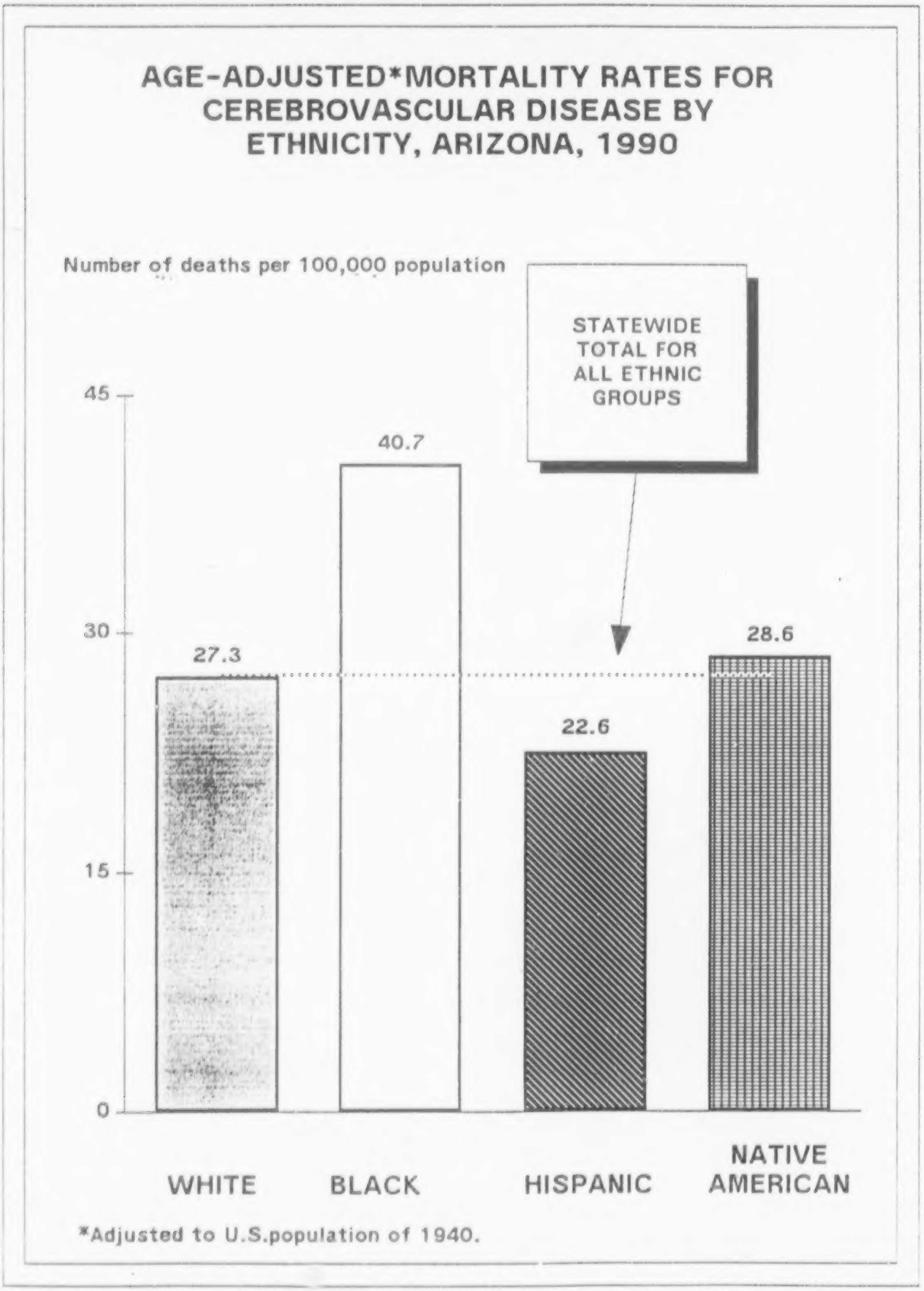
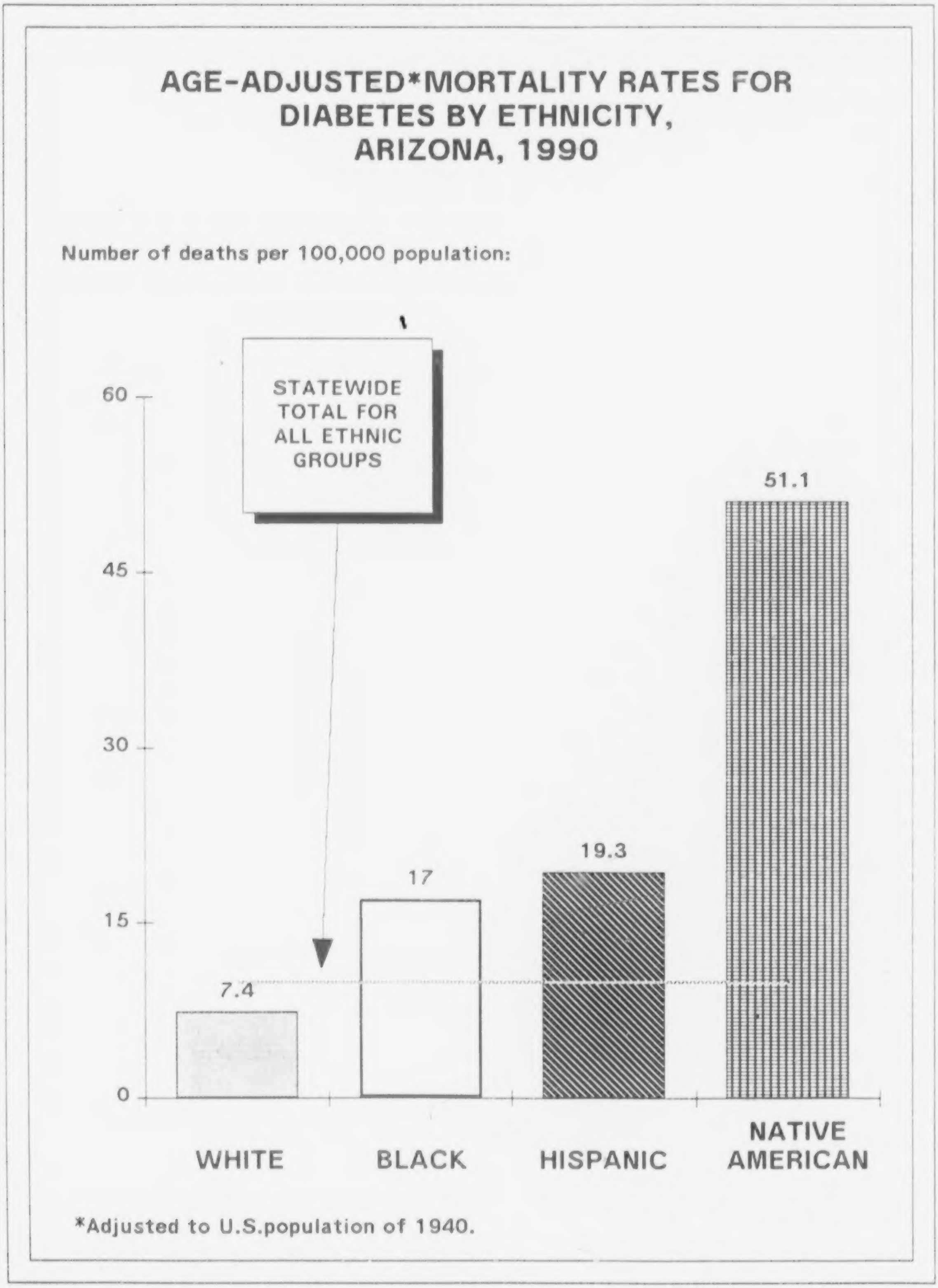

AGE-ADJUSTED*MORTALITY RATES FOR CEREBROVASCULAR DISEASE BY ETHNICITY, ARIZONA, 1990
Number of deaths per 100,000 population
STATEWIDE TOTAL FOR ALL ETHNIC GROUPS
45
30
15
0
27.3
40.7
22.6
28.6
WHITE
BLACK
HISPANIC
NATIVE AMERICAN
*Adjusted to U.S.population of 1940.

FIGURE 26.


AGE-ADJUSTED*MORTALITY RATES FOR DIABETES BY ETHNICITY, ARIZONA, 1990
Number of deaths per 100,000 population:
STATEWIDE TOTAL FOR ALL ETHNIC GROUPS
60
45
30
15
0
7.4
17
19.3
51.1
WHITE
BLACK
HISPANIC
NATIVE AMERICAN
*Adjusted to U.S.population of 1940.

AGE-SPECIFIC MORTALITY

AGE-SPECIFIC MORTALITY

Infant Mortality

In 1990, 602 infants died before their first birthday for an infant mortality rate (IMR) of 8.7 infant deaths per 1,000 live births (Table 3-1, Figure 27, 28, 29), the lowest IMR ever recorded in Arizona. Moreover, the 1990 IMR of 8.7 was better than the 1990 national objective of an IMR of 9.0, with the latter not attained for the nation as a whole. In 1990, infants born in Arizona were 4 percent less likely to die during their first year than their national counterparts.

County-specific IMRs ranged from a low of 4.0 for Gila county to a high of 18.5 for LaPaz county in 1990 (Table 3-1). Seven counties had a 1990 IMR that was lower than the statewide IMR. In rank order from lowest to highest IMR, these seven counties were Gila, Yavapai, Yuma, Cochise, Pinal, Pima, and Apache. The 1990 IMR was the lowest of the 1980 to 1990 period only for Gila and Yavapai counties.

Neonatal and Postneonatal Mortality

The 1990 neonatal mortality rate (NMR) for Arizona was lower than the national NMR as it has been annually during the last decade (Table 3-2). However, the 1990 NMR for Arizona was not the lowest annual rate of the 1980 to 1990 period, while the postneonatal mortality rate (PNMR) was the lowest. Postneonatal deaths comprised a larger proportional share of infant deaths in Arizona than in the nation in each year from 1981 to 1990, although the 1990 difference between the proportions was the smallest of the time period.

In nine of the 11 years from 1980 to 1990, the NMR was higher for urban counties than for rural counties (Table 3-2). In contrast, every annual PNMR during that time span for the urban counties was lower than the PNMR for the rural counties. From 1980 to 1990, the PNMR declined 31 percent for rural counties and 9 percent for urban counties. Thus, by 1990, the rural counties PNMR exceeded the urban counties PNMR by only 29 percent compared to 71 percent in 1980.

Cause-Specific Mortality of Infants

Death rates for most causes of infant death dramatically declined from 1980 to 1982 taking the IMR from 12.4 to 9.3, a 25 percent decrease (Table 3-3). Since 1982 to 1990, the decline in the IMR was much smaller at 6 percent and cause-specific death rates in most instances fluctuated within a fairly narrow range or remained relatively stable.

Certain conditions in the perinatal period was the only set of causes with its lowest death rate of the 11-year period in 1990. Within this set of causes, respiratory distress syndrome (RDS) was the only specific cause with its lowest rate in 1990. Indeed, in 1990 compared to 1982, RDS claimed infants' lives at a 57 percent lower rate.

In 1990, congenital anomalies was the second leading cause of infant death as it had been in each of the ten prior years. Similarly, during the 11-year period, except for 1987, sudden infant death syndrome (SIDS) was the third leading cause of infant death. Because 1990 death rates for both causes differed little from the 1982 rates and the overall IMR fell, both causes accounted for a proportionally greater share of deaths in 1990 than in 1982.

Mortality by Infant Ethnicity, Gender and Area

From highest to lowest rate, the five leading specific-cause contributors to neonatal death in 1990 were other perinatal conditions, disorders related to low birthweight or short gestation, other congenital anomalies, circulatory system anomalies, and other respiratory conditions in the perinatal period (Table 3-4). SIDS is overwhelmingly the major contributor to postneonatal deaths, followed by circulatory system anomalies, accidents/adverse events, infectious and parasitic diseases, and pneumonia/influenza.

Male infants were 52 percent more likely to die than female infants in 1990. More than a twofold excess in male compared to female cause-specific death rates were seen for respiratory distress syndrome, SIDS, and infectious and parasitic diseases. Female infants died at a higher rate than male infants from intrauterine hyoxia or birth asphyxia, respiratory system anomalies, and central nervous system anomalies (Table 3-4).

Black infants had more than double the chance of dying than either white non-Hispanic or Hispanic infants and a 42 percent greater chance than Native American infants. The excess IMR for Black infants primarily stemmed from the almost three times higher rate of death from certain conditions of the perinatal period compared to infants of each other ethnic group. Compared to white non-Hispanic and Hispanic infants, Black infants also had a twofold greater chance to die from SIDS. Native American infants resembled Black infants with respect to the SIDS death rate and also the elevated death rate for accidents/adverse effects.

Hispanic infants had the best chances of surviving until their first birthday among the four ethnic groups. They had the lowest death rates for other respiratory conditions in the perinatal period, maternal complications, circulatory system anomalies, accidents/adverse effects, and pneumonia/influenza.

The 1990 rural IMR was 7 percent higher than the urban IMR and exceeded the 1990 national objective. However, large differences in major cause-specific rates mainly disfavored urban relative to rural infants. Urban compared to rural infants were 150 percent more likely to die from disorders related to low birthweight/short gestation and 50 percent more likely to die from SIDS.

Temporal Trends in IMR, NMR and PNMR by Ethnicity

Both Hispanic male and female babies had the lowest IMRs among the ethnic and gender groups in 1990 (Table 3-5). However, the IMR for Hispanic male babies rose 27 percent from 1989 to 1990, while the IMR for Hispanic female babies fell 29 percent over that year. The IMR for Hispanic male babies was lower in seven of the years of the 1980s than it was in 1990, hence the 1990 IMR represents little improvement. In contrast, only one annual IMR of the 1980s was better than the 1990 IMR for Hispanic female babies, making the 1990 rate indicative of true progress.

Improvement also was noted for white non-Hispanic babies, the ethnic group with the second lowest IMR for both genders. The 1990 IMR for female infants was the lowest of the 11-year period, and the 1990 IMR for male infants was the second lowest. From 1980 to 1990, the IMR declined at least 31 percent for both genders.

Contrastingly, the 1990 IMR for Black male babies was only 5 percent lower than the 1980 rate and seven annual rates in the intervening years were lower than the 1990 rate. Black babies of either gender had the highest IMR among the groups. If babies of the other ethnic groups had the same chances of dying as Black babies, 511 more infants would have died during their first year of life in 1990.

Progress in reducing infant mortality was apparent for Native American female babies but not for male babies of the same ethnicity. Only one annual IMR of the 1980s was lower than the 1990 IMR for Native American female babies. However, the 1990 IMR for Native American male babies exceeded the rates of eight prior years.

Hispanic babies had the lowest 1990 PNMR, while white non-Hispanic babies had the lowest 1990 NMR (Table 3-6). Moreover, the 1990 NMR for white non-Hispanics was the lowest of the 11-year period. That observation did not apply to any other ethnic group.

Great strides have been made in reducing the excessive PNMRs for Native Americans seen in the early and mid-1980s, with the rate below 6 since 1987. Progress in improving either NMR or PNMR for Blacks has been elusive, with both rates fluctuating substantially year-to-year and later years not clearly better than earlier years. Black babies had the worst chances of any ethnic group of dying in either the neonatal or postneonatal period in 1990.

TABLE 3-1

INFANT MORTALITY RATES[1] BY COUNTY OF RESIDENCE, ARIZONA AND UNITED STATES, 1980 - 1990

COUNTY	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.[2]	12.6	11.9	11.5	11.2	10.8	10.6	10.4	10.0	9.9	9.7	9.1
ARIZONA	12.4	11.6	9.3	9.6	9.5	9.6	9.4	9.4	9.7	9.1	8.7
Apache	14.1	14.9	11.4	11.2	13.8	11.9	9.1	8.6	5.3	7.3	8.3
Cochise	12.1	13.4	9.0	12.8	14.2	9.6	5.2	6.8	8.5	6.9	7.5
Coconino	10.9	11.5	9.0	12.2	8.8	10.8	9.8	7.5	11.2	8.8	11.2
Gila	17.0	6.6	16.0	7.3	4.5	7.8	12.8	5.3	10.6	4.6	4.0
Graham	15.6	27.5	8.5	6.9	15.7	9.8	12.7	9.0	7.2	11.2	9.4
Greenlee	18.3	3.3	19.5	-	10.3	18.6	9.4	-	18.0	-	-
La Paz	NA	NA	NA	33.9	5.1	25.6	-	5.1	9.3	9.2	18.5
Maricopa	13.4	12.0	9.3	9.2	8.9	9.4	9.6	10.0	10.0	9.2	8.9
Mohave	20.7	9.0	12.4	9.7	8.1	7.2	10.3	8.5	12.2	17.0	11.4
Navajo	14.2	16.0	9.6	12.0	9.7	13.7	6.3	15.6	10.7	15.6	11.7
Pima	8.1	9.2	8.3	9.7	9.9	9.1	9.0	7.7	9.3	7.2	8.1
Pinal	9.2	9.0	9.8	9.1	14.6	8.8	13.1	8.9	7.2	11.0	8.0
Santa Cruz	6.0	9.6	6.1	6.6	7.8	7.6	7.9	12.8	12.0	11.4	10.2
Yavapai	11.8	15.0	9.4	10.7	11.0	8.3	11.5	9.4	10.1	9.6	6.6
Yuma	14.6	11.3	8.4	8.3	6.9	9.7	6.1	9.1	7.6	8.6	6.9

[1] Per 1,000 live births.

[2] U.S. data furnished by the National Center for Health Statistics; 1990 data are provisional.

TABLE 3-2

INFANT, NEONATAL AND POSTNEONATAL MORTALITY RATES AND PERCENT POSTNEONATAL DEATHS, UNITED STATES, ARIZONA AND URBAN/RURAL COUNTIES OF ARIZONA, 1980 - 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
UNITED STATES											
Infant mortality[1]	12.6	11.9	11.5	11.2	10.8	10.6	10.4	10.0	9.9	9.7	9.1
Neonatal mortality[1]	8.4	7.9	7.7	7.3	6.9	6.9	6.7	6.5	6.4	6.2	5.7
Postneonatal mortality[1]	4.2	4.0	3.8	3.9	3.9	3.7	3.7	3.5	3.5	3.6	3.4
Percent postneonatal deaths[2]	33.3	33.6	33.0	33.0	36.1	34.9	35.6	35.5	36.0	36.7	37.4
ARIZONA, STATEWIDE TOTAL											
Infant mortality[1]	12.4	11.6	9.3	9.6	9.5	9.6	9.4	9.4	9.7	9.1	8.7
Neonatal mortality[1]	8.3	7.4	5.8	5.9	5.5	5.9	5.4	5.9	5.9	5.5	5.4
Postneonatal mortality[1]	4.1	4.2	3.5	3.7	4.0	3.8	4.0	3.5	3.8	3.6	3.3
Percent postneonatal deaths[2]	33.1	36.2	37.6	38.5	42.1	39.6	42.6	37.1	39.2	40.0	37.9
URBAN COUNTIES											
Infant mortality[1]	12.0	11.3	9.0	9.2	9.1	9.4	9.5	9.5	9.9	8.8	8.6
Neonatal mortality[1]	8.6	7.7	5.8	5.8	5.7	6.0	5.9	6.1	6.3	5.4	5.5
Postneonatal mortality[1]	3.4	3.6	3.2	3.4	3.4	3.4	3.6	3.4	3.6	3.4	3.1
Percent postneonatal deaths[2]	28.4	32.1	35.2	37.0	37.0	35.8	37.8	35.8	36.4	39.1	36.1
RURAL COUNTIES											
Infant mortality[1]	13.2	12.5	10.1	10.6	10.7	10.4	9.0	9.3	9.1	10.2	9.2
Neonatal mortality[1]	7.4	6.7	5.6	6.2	5.0	5.4	4.1	5.5	4.6	5.9	5.2
Postneonatal mortality[1]	5.8	5.8	4.4	4.4	5.7	5.0	4.9	3.8	4.5	4.3	4.0
Percent postneonatal deaths[2]	43.9	46.4	44.0	41.3	53.5	47.8	54.8	41.1	49.3	42.4	43.5

[1] Rates per 1,000 live births. The U.S. rates are from the National Center for Health Statistics: Births, Marriages, Divorces and Deaths for 1990, April 8, 1990.

[2] Total infant mortality = 100 percent.

NOTE: Prior to 1990, Maricopa and Pima Counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-3

INFANT MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES OF DEATH,[2] BY YEAR, ARIZONA, 1980 - 1990

CAUSE OF DEATH	ICD Codes	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Certain conditions in perinatal period	760-779	6.1	4.8	3.5	3.6	3.4	3.4	3.8	3.9	3.9	3.4	3.3
Low birthweight/ short gestation	765	0.9	1.0	0.6	0.7	0.8	0.9	1.0	1.9	1.2	0.8	0.9
Respiratory distress syndrome	769	1.2	1.0	0.7	0.8	0.7	0.8	0.7	0.7	0.5	0.4	0.3
Other respiratory	770	0.8	0.6	0.6	0.6	0.9	0.5	0.7	0.4	0.6	0.9	0.7
Intrauterine hypoxia or birth asphyxia	768	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.1	0.2	0.1	0.2
Maternal complications	761	0.4	0.2	0.1	0.2	0.1	0.2	0.3	0.1	0.2	0.3	0.2
Other perinatal conditions	760,762-764 766-767, 771-779	2.6	1.8	1.2	1.1	0.7	0.8	0.9	0.7	1.3	1.0	1.1
Congenital anomalies	740-759	2.8	3.1	2.4	2.6	2.4	2.6	2.0	2.3	2.4	2.3	2.5
Circulatory system	745-747	1.2	1.2	1.1	1.1	1.0	1.0	0.6	0.8	1.1	0.9	0.9
Respiratory system	748	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.4	0.5
Central nervous system	740-742	0.5	0.5	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other congenital anomalies	743-744, 749-759	0.9	1.1	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.6	0.8
Sudden infant death syndrome	798.0	1.4	1.6	1.4	1.6	1.5	1.5	1.9	1.5	1.8	1.7	1.4
Accidents/adverse effects	800-949	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.4	0.3	0.4	0.3
Pneumonia/influenza	480-487	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
All causes		12.4	11.6	9.3	9.6	9.5	9.6	9.4	9.4	9.7	9.1	8.7

[1] Infant mortality rates are presented per 1,000 live births.

[2] The five causes with the greatest number of deaths over the 1980-1990 period.

TABLE 3-4

INFANT MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES OF DEATH,[2] BY AGE GROUP, GENDER, ETHNICITY AND AREA,[3] ARIZONA, 1990

		AGE		GENDER		ETHNICITY				AREA	
Cause of Death:	Total	Neonatal	Post Neonatal	Male	Female	White	Hispanic	Black	Native American	Urban	Rural
Certain conditions in perinatal period	3.3	3.1	0.2	4.0	2.6	3.0	3.1	9.5	3.4	3.4	3.2
Low birthweight/ short gestation	0.9	0.9	-	1.1	0.6	0.8	0.9	1.6	1.0	1.0	0.4
Respiratory distress syndrome	0.3	0.3	-	0.5	0.1	0.3	0.2	0.6	0.2	0.2	0.3
Other respiratory	0.7	0.5	0.2	0.8	0.6	0.7	0.5	3.5	0.3	0.7	0.8
Intrauterine hypoxia or birth asphyxia	0.2	0.1	0.0*	0.1	0.2	0.1	0.4	-	-	0.2	0.1
Maternal complications	0.2	0.2	-	0.2	0.2	0.3	0.1	0.3	0.3	0.2	0.3
Other perinatal conditions	1.1	1.1	0.0*	1.4	0.9	0.9	1.1	3.5	1.6	1.1	1.1
Congenital anomalies	2.5	2.0	0.5	2.7	2.3	2.4	2.5	2.9	3.1	2.5	2.5
Circulatory system	0.9	0.6	0.3	1.0	0.8	1.0	0.6	1.0	1.5	0.9	1.0
Respiratory system	0.5	0.4	0.1	0.4	0.5	0.4	0.6	0.3	0.7	0.4	0.6
Central nervous system	0.3	0.2	0.0*	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3
Other congenital anomalies	0.8	0.8	0.0	1.0	0.7	0.7	1.0	1.3	0.8	0.9	0.7
Sudden infant death syndrome	1.4	0.1	1.3	1.9	0.8	1.3	1.2	2.5	2.1	1.5	1.0
Accidents/adverse effects	0.3	0.0*	0.3	0.4	0.3	0.4	0.2	0.6	0.5	0.4	0.3
Infectious and parasitic diseases[4]	0.2	0.0*	0.2	0.3	0.1	0.1	0.2	-	0.2	0.1	0.3
Pneumonia/influenza	0.2	0.0*	0.2	0.2	0.1	0.2	0.1	0.3	0.3	0.2	0.2
All causes	8.7	5.4	3.3	10.5	6.9	8.2	7.8	16.8	11.8	8.6	9.2

[1] Infant mortality rates are presented per 1,000 live births.
[2] The five causes with the greatest number of deaths in 1990
[3] Urban areas are Maricopa, Pima and Yuma Counties. The remaining 12 counties comprise Arizona's rural areas.
[4] Includes HIV infection.
- No infant death.
* 0.0 quantity less than 0.05.

TABLE 3-5

NUMBER AND RATE[1] OF INFANT DEATHS BY INFANT'S ETHNIC GROUP AND GENDER, ARIZONA, 1980-1990

	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		1990	
Ethnic Group	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All ethnic groups[2]																						
Total	619	12.4	600	11.6	491	9.3	509	9.6	525	9.5	572	9.6	569	9.4	598	9.4	634	9.7	613	9.1	602	8.7
Male	364	14.1	360	13.7	296	10.9	288	10.5	258	9.1	350	11.5	338	10.9	347	10.7	352	10.5	321	9.3	370	10.5
Female	255	10.6	240	9.5	195	7.8	221	8.6	267	10.0	222	7.7	231	8.3	251	8.1	282	8.8	292	8.9	232	6.9
White[3]																						
Total	367	12.2	336	11.2	300	9.8	289	9.3	285	8.8	344	9.9	330	8.9	330	9.0	333	9.0	330	9.0	302	8.2
Male	213	14.0	201	13.0	177	11.1	164	10.2	144	8.6	220	12.3	199	10.3	200	10.7	188	9.9	185	9.8	184	9.7
Female	154	10.9	135	9.3	123	8.3	125	8.3	141	8.9	124	7.3	136	7.5	130	7.4	145	8.1	145	8.1	118	6.6
Hispanic																						
Total	130	9.9	130	9.5	100	7.4	109	82	115	8.3	120	8.0	129	7.5	141	8.0	181	9.9	159	8.0	168	7.8
Male	81	12.0	86	12.4	62	9.0	63	9.2	50	7.1	68	8.8	77	8.9	79	8.8	101	10.9	76	7.4	103	9.4
Female	49	7.7	44	6.5	38	5.7	46	7.2	65	6.3	52	7.1	52	6.1	62	7.2	80	8.9	83	8.6	65	6.1
Black																						
Total	40	15.3	54	24.5	27	11.8	50	21.4	45	18.3	32	12.7	41	15.0	45	15.6	55	17.9	54	17.5	53	16.8
Male	23	21.6	31	27.1	17	14.2	32	26.6	19	15.2	20	16.0	29	20.4	23	15.6	30	19.3	26	16.6	33	20.5
Female	17	17.0	23	21.8	10	9.1	18	15.8	26	21.6	12	9.4	12	9.2	22	15.6	25	16.5	28	18.5	20	13.0
Native American																						
Total	82	16.2	76	14.9	59	11.0	57	10.3	75	13.4	72	12.2	67	11.8	79	13.2	61	9.9	66	10.5	73	11.8
Male	46	17.9	39	15.5	37	13.7	27	9.5	42	14.9	38	13.0	37	13.2	45	15.0	30	9.6	31	9.9	47	15.1
Female	36	14.5	37	14.3	22	8.2	30	11.3	33	11.9	34	11.4	30	10.5	34	11.5	31	10.2	35	11.1	26	8.5

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[1] Rate per 1,000 live births in specified ethnic/gender group.
[2] Includes records with other and unknown ethnic group.
[3] Includes only whites of non-Hispanic origin.

TABLE 3-6

NUMBER AND RATE[1] OF INFANT DEATHS BY INFANT'S ETHNIC GROUP AND AGE GROUP, ARIZONA, 1980-1990

Ethnic Group/	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		1990	
Infant Age Group	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
All ethnic groups[2]																						
Total Infant	619	12.4	600	11.6	491	9.3	509	9.6	525	9.5	572	9.6	569	9.4	598	9.4	634	9.7	613	9.1	602	8.7
Neonatal	414	8.3	381	7.4	305	5.8	314	5.9	305	5.5	348	5.9	331	5.4	376	5.9	384	5.9	368	5.5	373	5.4
Postneonatal	255	4.1	219	4.2	186	3.5	195	3.7	220	4.0	224	3.7	238	4.0	222	3.5	250	3.8	245	3.6	229	3.3
White[3]																						
Total Infant	367	12.2	336	11.2	300	9.8	289	9.3	285	8.8	344	9.9	330	8.9	330	9.0	333	9.0	330	9.0	302	8.2
Neonatal	213	7.1	233	7.8	202	6.6	178	5.7	179	5.5	225	6.5	200	5.8	251	7.0	205	5.7	205	5.6	187	5.1
Postneonatal	154	5.1	103	3.4	98	3.2	111	3.6	106	3.3	119	3.4	134	3.9	79	2.2	129	3.6	125	3.4	115	3.1
Hispanic																						
Total Infant	130	9.9	130	9.5	100	7.4	109	82	115	8.3	120	8.0	129	7.5	141	8.0	181	9.9	159	8.0	168	7.8
Neonatal	81	6.2	83	6.1	66	4.9	77	5.8	72	5.2	64	4.3	74	4.3	47	2.7	107	5.5	100	5.0	115	5.3
Postneonatal	49	3.7	47	3.5	34	2.5	32	2.4	43	3.1	56	3.7	51	3.0	94	5.3	73	3.8	59	3.0	53	2.5
Black																						
Total Infant	40	15.3	54	24.5	27	11.8	50	21.4	45	18.3	32	12.7	41	15.0	45	15.6	55	17.9	54	17.5	53	16.8
Neonatal	23	11.2	39	17.7	18	7.9	31	13.2	22	8.9	25	9.9	26	9.5	32	11.1	43	14.0	28	9.1	32	10.1
Postneonatal	17	8.2	15	6.8	9	3.9	19	8.1	23	9.4	7	2.8	15	5.5	13	4.5	12	3.9	26	8.4	21	6.7
Native American																						
Total Infant	82	16.2	76	14.9	59	11.0	57	10.3	75	13.4	72	12.2	67	11.8	79	13.2	61	9.9	66	10.5	73	11.8
Neonatal	46	17.9	24	4.7	15	2.8	26	4.7	28	5.0	31	5.3	30	5.3	44	7.4	27	4.4	32	5.1	37	6.0
Postneonatal	36	14.5	52	10.2	44	8.2	31	5.6	47	8.4	41	6.9	37	6.6	35	5.8	34	5.5	34	5.4	36	5.8

[1] Rate per 1,000 live births in specified child's ethnic group.

[2] Includes records with other and unknown ethnic group.

[3] Includes only whites of non-Hispanic origin.

FIGURE 27.

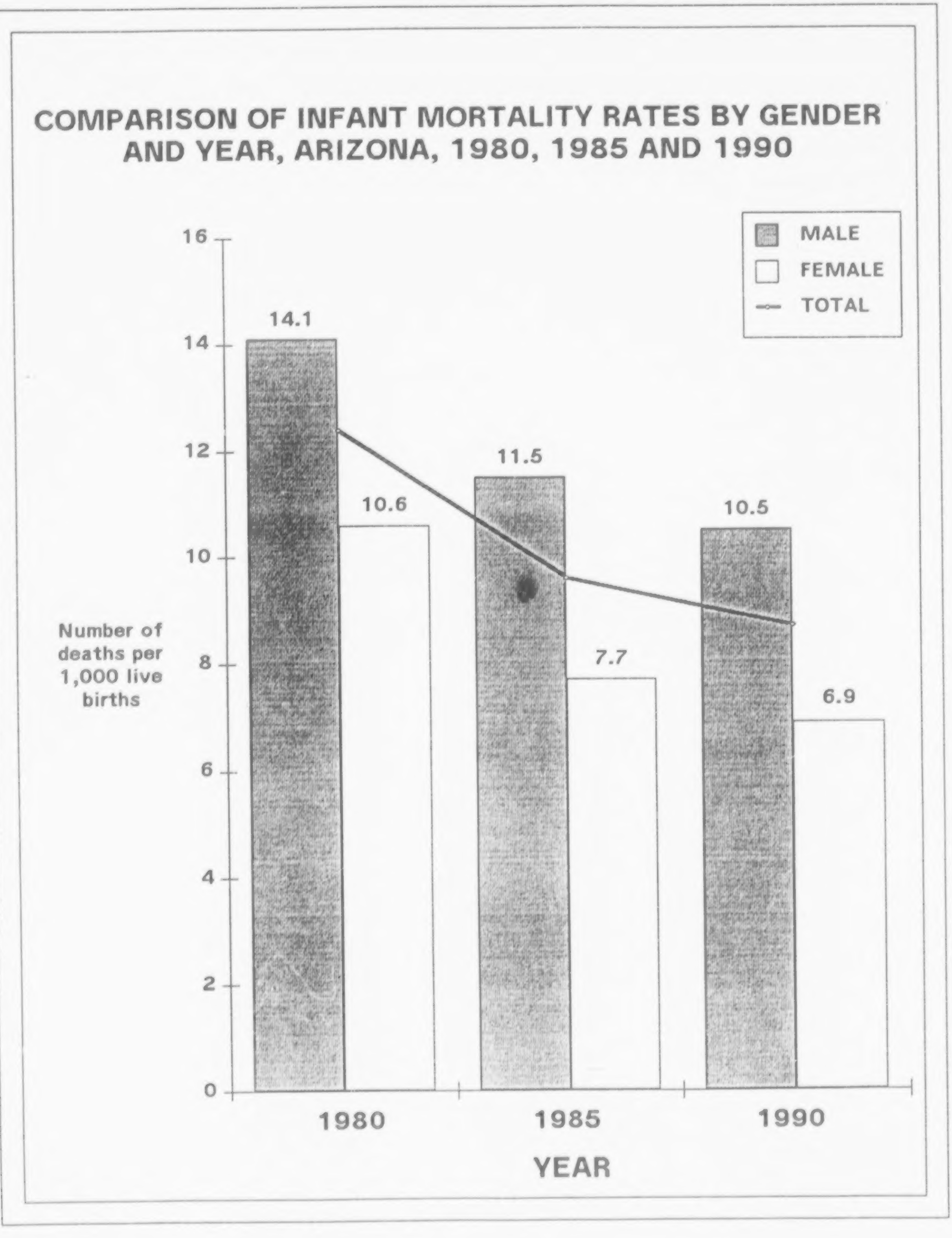
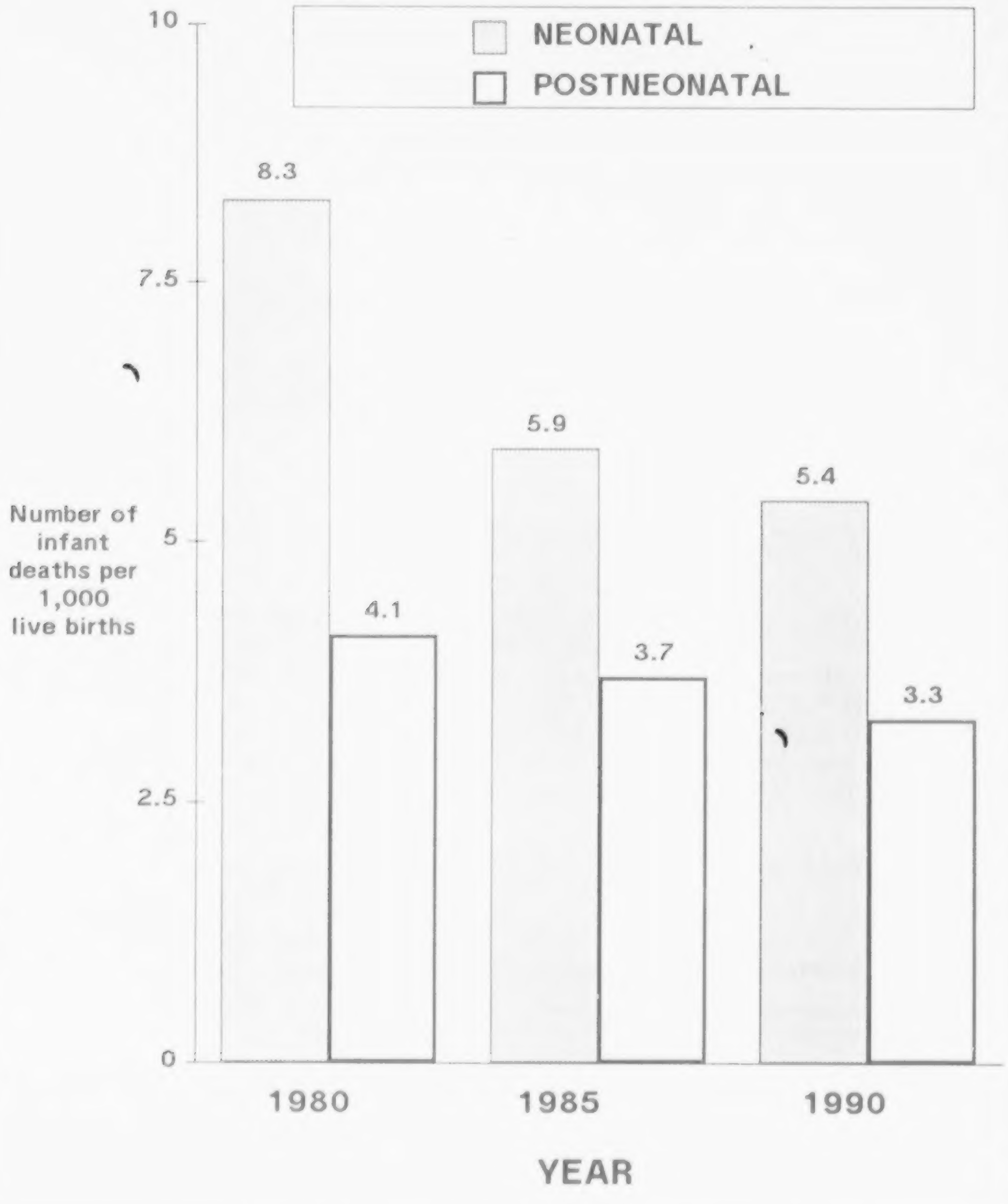

COMPARISON OF INFANT MORTALITY RATES BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990
MALE
FEMALE
TOTAL
Number of deaths per 1,000 live births
0
2
4
6
8
10
12
14
16
14.1
10.6
11.5
7.7
10.5
6.9
1980
1985
1990
YEAR

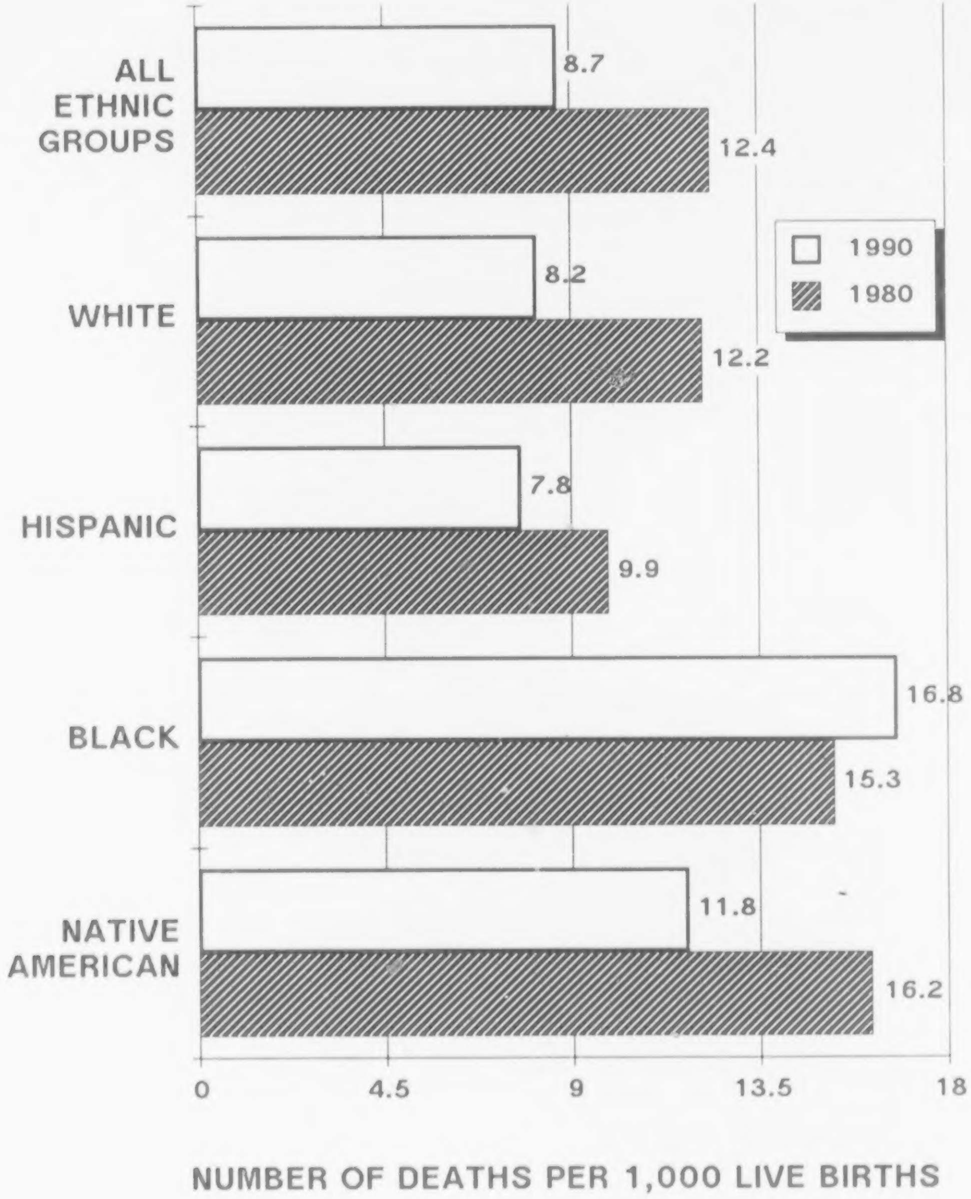
FIGURE 28.



COMPARISON OF MORTALITY RATES BY INFANT'S AGE GROUP AND YEAR, ARIZONA, 1980, 1985 AND 1990

FIGURE 29.

COMPARISON OF INFANT MORTALITY RATES FROM ALL CAUSES BY ETHNIC GROUP AND YEAR, ARIZONA 1980 AND 1990



Childhood Mortality

The 1990 population of 781,543 children aged 1 to 14 was 31 percent larger than the 1980 population of children. Children in 1990 had better survival chances than children in 1980, as reflected in the 28 percent reduction in total mortality (Table 3-7). Their 1990 death rate of 33.0 per 100,000 was not only the lowest of the 11-year period from 1980 to 1990 but also better than the 1990 objective of fewer than 34 deaths per 100,000 children aged 1 to 14.

The improvement in survival chances of children was largely due to the 41 percent reduction in the death rate from unintentional injuries and the 24 percent reduction in mortality from cancer from 1980 to 1990 (Table 3-7). The large decrease in the unintentional injury death rate was primarily due to the declines in drowning and other injuries not related to motor vehicles. Death rates from drowning were almost halved and fatal injuries due to poisonings, falls, fires, etc. were more than halved from 1980 to 1990. In contrast, the 25 percent reduction from 1980 to 1990 in rates of fatalities from motor vehicle related events occurred, in fact, from 1980 to 1985. From 1985 to 1990, no improvement was made in reducing the rate of death from injuries due to motor vehicles. The remaining three leading causes of childhood death in 1990, namely congenital anomalies, homicide and infectious and parasitic diseases, showed little change or a slight increase in mortality rate from the 1980 level.

Gender Differences. The decline in total mortality was nearly identical for the two genders (Figure 30), so the male excess in mortality risk relative to females was almost the same in 1990 as in 1980 (about 60 percent). The improvement from 1980 to 1990 in death rates for drowning and other unintentional injuries as well as the 1980 to 1985 reduction in motor vehicle fatality rates were more pronounced for females than for males (Table 3-7). Thus, males were more disadvantaged with respect to females in the mortality risk for unintentional injuries in 1990 than in 1980, with an excess risk of 142 percent and 102 percent respectively.

In contrast, mortality rates for cancer and for congenital anomalies declined for males but increased for females. In 1980, males were at higher risk to die from either of these causes than females. By 1990, females had the mortality disadvantage relative to males. Males were at higher risk to be murdered or to die from infectious and parasitic diseases in 1980 and remained so in 1990.

Geographic Differences. Total mortality declined from 1980 to 1990 almost twice as much for urban children than for rural children (Table 3-8, Figure 31). The temporal pattern underlying the declines significantly differed by region. From 1980 to 1985, total mortality rates for children in both regions decreased by 14 percent. After 1985 to 1990, urban children experienced a continued improvement of 20 percent in total mortality, while total mortality was reduced a mere 2 percent for rural children. Thus, the risk of death among rural children compared to their urban peers went from 18 percent greater in 1980 and 1985 to 44 percent greater in 1990, producing a greater geographic inequity. Rural children had the same chances of dying in 1990 that urban children had ten years earlier in 1980. The 1990 total mortality rate for rural children exceeded the 1990 national objective by 27 percent, while 1990 total mortality for urban children was 12 percent better than the national objective.

A major contributor to the greater inequity between rural and urban children was that the reduction in motor vehicle fatality rates seen from 1980 to 1985 for children of both regions was maintained and slightly improved upon after 1985 to 1990 only for urban children. Rural children, in contrast, had a higher motor vehicle related injury death rate in 1990 than in 1980. Another contributor was that death rates for homicide and infectious and parasitic diseases dramatically increased from 1980 to 1990 for rural children, while they declined for urban children.

Both rural male and female children had less than one-half the improvement in total mortality respective to their urban gender counterparts from 1980 to 1990 (Table 3-9). Urban females had the lowest 1990 mortality risk, followed by rural females, urban males, and rural males.

Ethnic Differences. Total mortality rates decreased by 36 percent from 1980 to 1990 for white non-Hispanic and Hispanic children, but increased by 24 percent for Native American children and by 5 percent for Black children (Table 3-10, Figure 32). The total mortality rates of white non-Hispanic and Hispanic children were at least 16 percent better than the national objective, with Hispanic children having the best survival chances in 1990.

In contrast, Native American children had the poorest survival chances and their total mortality rate was 145 percent worse than the national objective. Their survival chances worsened from the beginning of the 1980s to the start of the 1990s because the rate of death from every leading cause of death, except cancer, increased over the time period. Increases of at least 48 percent occurred in rates of death from homicide, infectious and parasitic diseases, and unintentional injuries.

In 1990, Native American children were fatally injured at a rate 4.4 times higher than the rate for Hispanic children, 3.8 times higher than the rate for white non-Hispanic children, and 2 times higher than the rate for Black children. The disparity between Native American children and children of other ethnic groups in the mortality risk of unintentional injuries was greater in 1990 than in 1980 when the largest differential was 1.5 (times). Moreover, in 1980, the mortality rate for vehicular-related injuries for Native American children was not double the rate of any other ethnic group. By 1990, motor vehicle inflicted injuries killed Native American at a 4.3 times higher rate than white non-Hispanic children and a 2.8 times higher rate than Hispanic children. Other injuries, excluding drowning and motor vehicle related, also showed larger differentials in death rates between Native American children and children of each of the other ethnic groups in 1990 than in 1980. The 1990 excess in mortality rate for other unintentional injuries such as falls, fires and poisonings for Native American children ranged from a low of 4.9 times greater when Black children were the comparison group to a high of 32.2 times greater relative to Hispanic children.

Homicide was not one of the five leading causes of death for Hispanic children as it was for every other ethnic group. White non-Hispanic children like Native American children also had a higher death rate for homicide in 1990 than in 1980, but their risk of being murdered was 80 percent lower than the risk of Native American children. Moreover, Native American children had the highest risk to be murdered among the ethnic groups in both 1980 and 1990.

White non-Hispanic children had the highest 1990 mortality rate for cancer, followed by Native American children and Hispanic children. The 1990 death rate for congenital anomalies was highest among Native American children, followed by Hispanic children and white non-Hispanic children. Infectious and parasitic diseases, including HIV infection, claimed lives at the highest rate among Black children, followed by Native American children, Hispanic children, and white non-Hispanic children.

TABLE 3-7

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG CHILDREN (1-14 years) BY GENDER, ARIZONA, 1980, 1985 AND 1990

Gender/Cause	1980	1985	1990	Percent Change from 1980
MALE				
Unintentional injuries	33.2	27.5	20.8	-37.3
Motor vehicle-related	16.1	12.9	12.0	-25.5
Drowning	6.9	6.2	3.8	-44.9
Other	10.2	8.4	5.0	-51.0
Malignant neoplasms	4.3	2.5	2.3	-46.5
Congenital anomalies	3.0	3.1	2.0	-33.3
Homicide	3.0	3.1	2.8	-6.7
Infectious & parasitic diseases[3]	1.6	0.6	2.0	+25.0
ALL CAUSES	56.2	49.6	40.3	-28.3
(Number of all deaths)	(171)	(177)	(161)	(-5.9)
FEMALE				
Unintentional injuries	16.4	10.7	8.6	-47.6
Motor vehicle-related	8.2	4.9	6.3	-23.2
Drowning	3.4	2.9	1.6	-52.9
Other	4.8	2.9	0.8	-83.3
Malignant neoplasms	3.1	4.4	3.4	+9.7
Congenital anomalies	2.0	2.3	3.4	+70.0
Homicide	1.7	1.7	1.6	-5.6
Infectious & parasitic diseases	1.0	0.3	1.0	0.0
ALL CAUSES	34.8	28.5	25.4	-27.0
(Number of all deaths)	(102)	(98)	(97)	(-4.9)
TOTAL				
Unintentional injuries	24.9	19.3	14.8	-40.6
Motor vehicle-related	12.2	9.0	9.2	-24.6
Drowning	5.2	4.6	2.7	-48.1
Other	7.5	5.7	2.9	-61.3
Malignant neoplasms	3.7	3.4	2.8	-24.3
Congenital anomalies	2.5	2.7	2.7	+8.0
Homicide	2.3	2.4	2.2	-4.3
Infectious & parasitic diseases[3]	1.3	0.4	1.5	+15.4
ALL CAUSES	45.7	39.2	33.0	-27.8
(Number of all deaths)	(273)	(275)	(258)	(-5.5)

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[1] Rates are presented per 100,000 population.
[2] The five causes with the greatest number of deaths in 1990.
[3] Includes one death from HIV infection in 1990.

TABLE 3-8

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG CHILDREN (1-14 years) IN URBAN AND RURAL AREAS,[3] ARIZONA, 1980, 1985 AND 1990

Area/Cause	1980	1985	1990	Percent Change from 1980
URBAN				
Unintentional injuries	22.5	17.4	13.2	-41.3
Motor vehicle-related	12.7	8.6	8.3	-34.7
Drowning	4.9	4.1	2.7	-44.9
Other	4.9	4.7	2.2	-55.1
Malignant neoplasms	3.5	3.1	2.5	-28.6
Congenital anomalies	2.6	3.5	2.8	+7.7
Homicide	2.6	2.8	1.7	-34.6
Infectious & parasitic diseases[4]	1.4	0.6	1.3	-7.1
ALL CAUSES	43.5	37.4	30.0	-31.0
(Number of all deaths)	(185)	(190)	(180)	(-2.7)
RURAL				
Unintentional injuries	30.9	23.9	20.5	-33.7
Motor vehicle-related	11.1	9.9	12.2	+9.9
Drowning	5.8	5.7	2.8	-51.7
Other	14.0	8.3	5.5	-60.7
Congenital anomalies	2.3	0.5	2.2	-4.4
Malignant neoplasms	4.1	4.2	3.9	-4.9
Homicide	1.8	1.6	3.9	+116.7
Infectious & parasitic diseases	1.2	-	2.2	+83.3
ALL CAUSES	51.3	44.3	43.2	-15.8
(Number of all deaths)	(88)	(85)	(78)	(-11.4)
STATEWIDE				
Unintentional injuries	24.9	19.3	14.8	-40.6
Motor vehicle-related	12.2	9.0	9.2	-24.6
Drowning	5.2	4.6	2.7	-48.1
Other	7.5	5.7	2.9	-61.3
Malignant neoplasms	3.7	3.4	2.8	-24.3
Congenital anomalies	2.5	2.7	2.7	+8.0
Homicide	2.3	2.4	2.2	-4.4
Infectious & parasitic diseases[4]	1.3	0.4	1.5	+15.4
ALL CAUSES	45.7	39.2	33.0	-27.8
(Number of all deaths)	(273)	(275)	(258)	(-5.5)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

[3] Prior to 1990, Maricopa and Pima Counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

[4] Includes one death from HIV infection in 1990.

TABLE 3-9

MORTALITY RATES[1] AMONG CHILDREN (1-14 years) BY GENDER IN URBAN AND RURAL AREAS,[2] ARIZONA, 1980, 1985 and 1990

Area/Gender	1980	1985	1990	Percent change from 1980
URBAN				
Male	51.6	48.6	35.5	-31.2
Female	35.0	25.5	24.2	-30.9
Total	43.5	37.4	30.0	-31.0
RURAL				
Male	67.8	52.3	56.4	-16.8
Female	34.4	36.4	29.4	-14.5
Total	51.3	44.3	43.2	-15.8
STATEWIDE				
Male	56.2	49.6	40.3	-28.3
Female	34.8	28.5	25.4	-27.0
Total	45.7	39.2	33.0	-27.8

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[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima Counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-10

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG CHILDREN (1-14 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Unintentional injuries	24.3	11.8	-51.4
	Motor vehicle-related	11.1	6.1	-45.1
	Drowning	4.5	3.5	-22.2
	Other injury	8.7	2.2	-74.7
	Malignant neoplasms	4.2	3.3	-21.4
	Congenital anomalies	2.4	2.6	+8.3
	Homicide	1.3	1.8	+38.5
	Infectious & parasitic diseases	1.3	1.1	-15.4
	ALL CAUSES	44.4	28.5	-35.8
	(Number of all deaths)	(168)	(130)	-22.6
Hispanic	Unintentional injuries	24.3	10.4	-57.2
	Motor vehicle-related	10.7	9.5	-11.2
	Drowning	9.3	0.5	-94.6
	Other injury	4.3	0.5	-88.4
	Congenital anomalies	2.1	2.8	+33.3
	Malignant neoplasms	1.4	1.9	+35.7
	Pneumonia & influenza	1.4	1.9	+35.7
	Infectious & parasitic diseases	0.7	1.4	+100.0
	ALL CAUSES	39.9	25.5	-36.1
	(Number of all deaths)	(56)	(54)	-3.6
Black	Unintentional injuries	20.9	23.1	+10.5
	Motor vehicle-related	15.7	16.5	+5.1
	Drowning	5.2	3.3	-36.5
	Other injury	-	3.3	NA
	Infectious & parasitic diseases[3]	-	6.6	NA
	Homicide	-	3.3	NA
	Pneumonia & influenza	-	3.3	NA
	ALL CAUSES	47.2	49.5	+4.9
	(Number of all deaths)	(9)	(15)	+66.7
Native American	Unintentional injuries	30.7	45.4	+47.8
	Motor vehicle-related	19.2	26.3	+37.0
	Drowning	-	2.9	NA
	Other injury	11.5	16.1	+40.0
	Homicide	3.8	8.8	+131.6
	Congenital anomalies	3.8	4.4	+15.8
	Infectious & parasitic diseases	1.9	2.9	+52.6
	Malignant neoplasms	5.7	2.9	-49.1
	ALL CAUSES	67.1	83.4	+24.3
	(Number of all deaths)	(35)	(57)	-62.9
Total: All Ethnic Groups[4]	Unintentional injuries	24.9	14.8	-40.6
	Motor vehicle-related	12.2	9.2	-24.6
	Drowning	5.2	2.7	-48.1
	Other injury	7.5	2.9	-61.3
	Malignant neoplasms	3.7	2.8	-24.3
	Congenital anomalies	2.5	2.7	+8.0
	Homicide	2.3	2.2	-4.4
	Infectious & parasitic diseases	1.4	1.5	+7.1
	ALL CAUSES	45.7	33.0	-27.8
	(Number of all deaths)	(273)	(258)	-5.5

[1] Leading causes are based on 1990 vital records.
[2] Whites of non-Hispanic origin.
[3] Includes one death from HIV infection in 1990.
[4] Includes other ethnic groups.
- Quantity zero (no recorded deaths).

FIGURE 30.

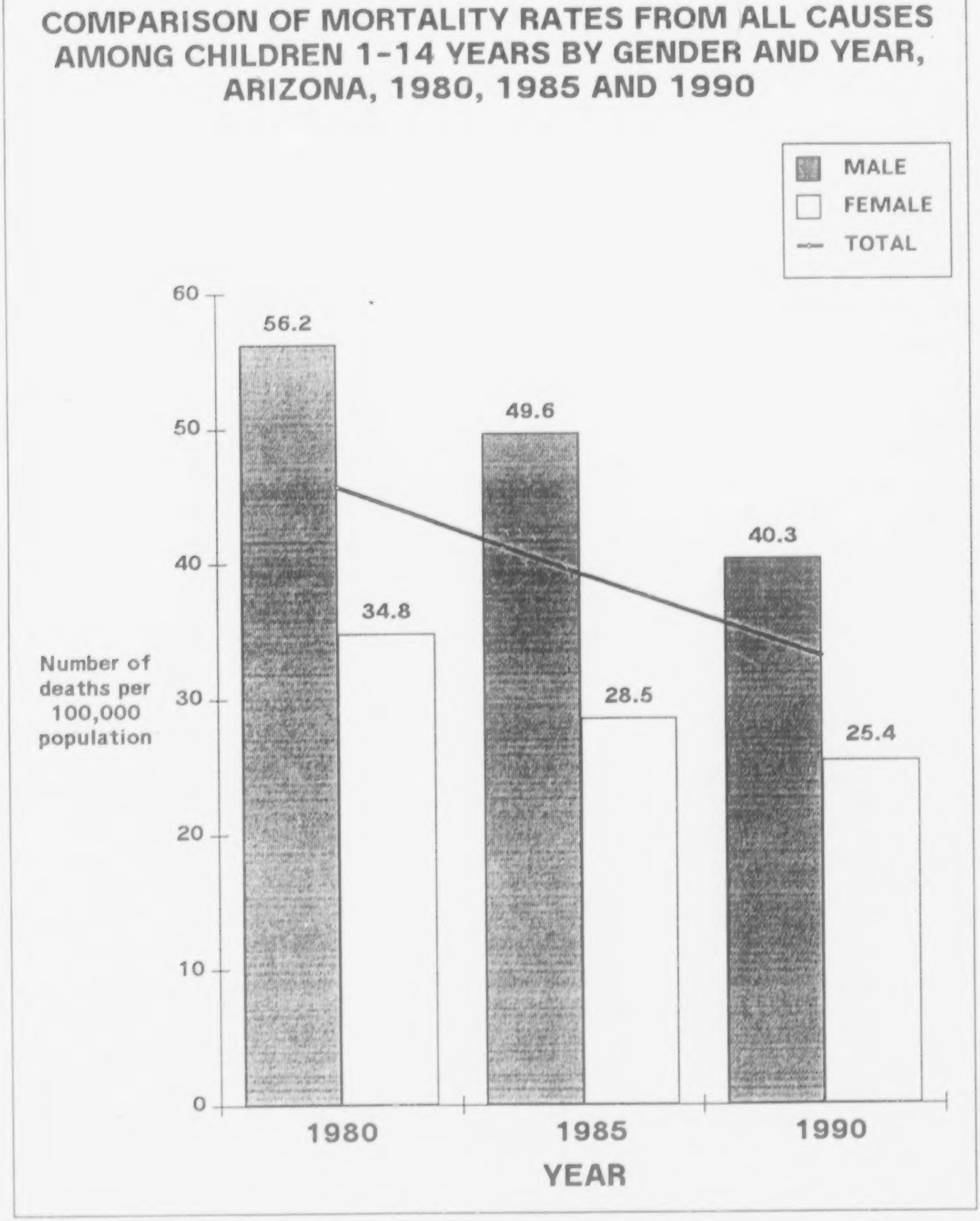
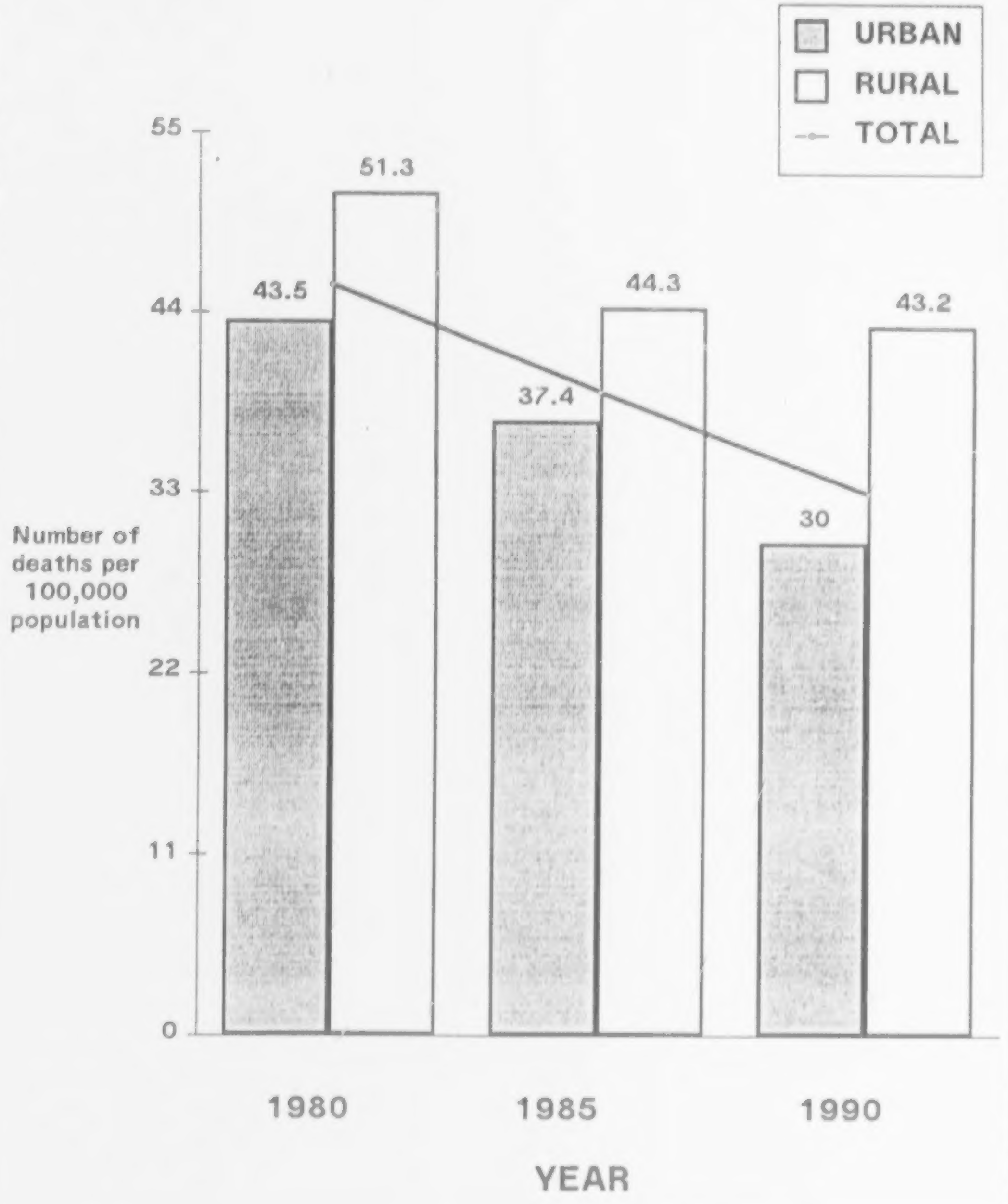
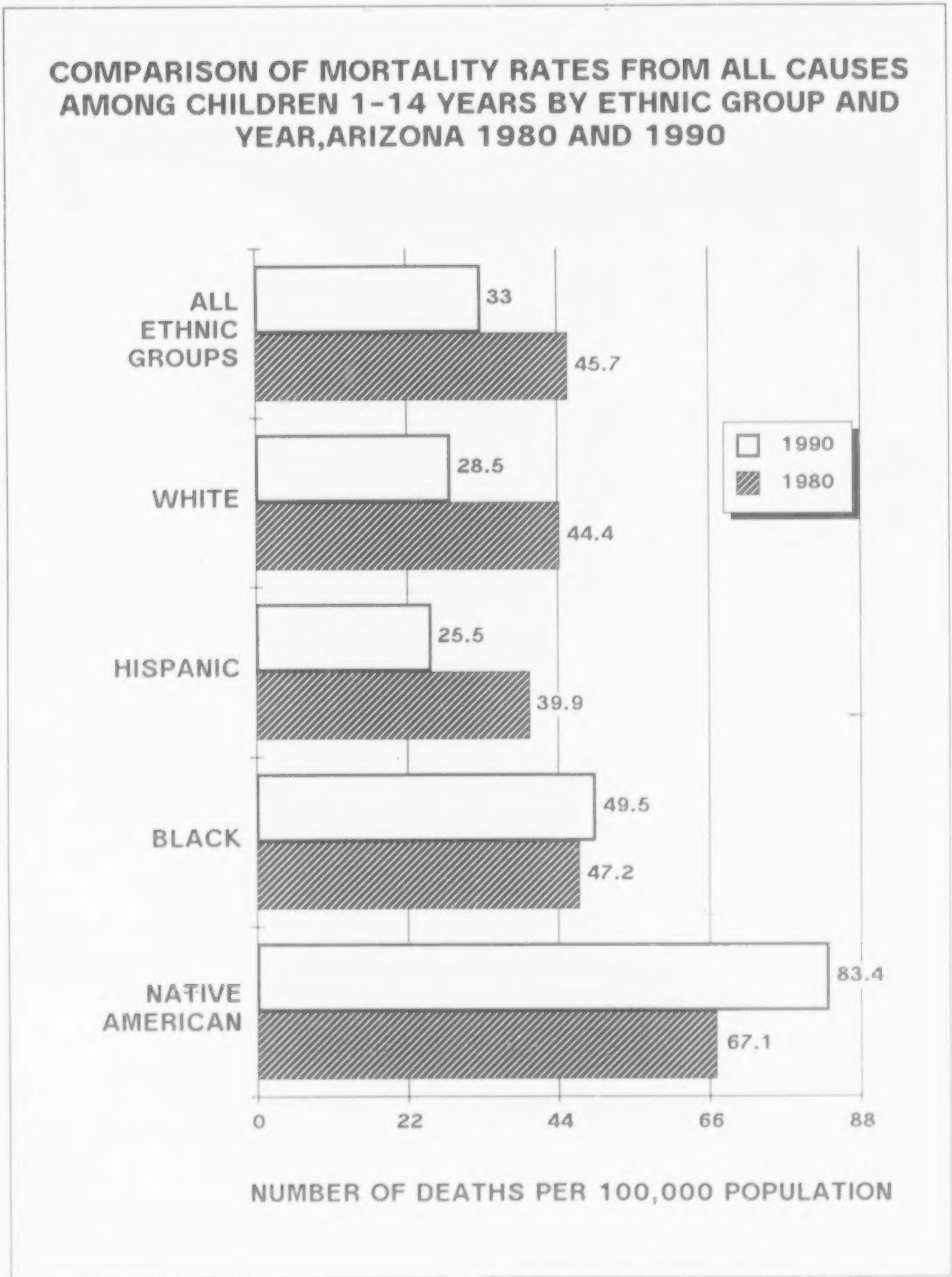

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG CHILDREN 1-14 YEARS BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990
MALE
FEMALE
TOTAL
Number of deaths per 100,000 population
60
50
40
30
20
10
0
56.2
34.8
49.6
28.5
40.3
25.4
1980
1985
1990
YEAR

FIGURE 31.



COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG CHILDREN 1-14 YEARS IN URBAN AND RURAL AREAS BY YEAR, ARIZONA, 1980, 1985 AND 1990

FIGURE 32.


COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG CHILDREN 1-14 YEARS BY ETHNIC GROUP AND YEAR,ARIZONA 1980 AND 1990
ALL ETHNIC GROUPS
33
45.7
WHITE
28.5
44.4
HISPANIC
25.5
39.9
BLACK
49.5
47.2
NATIVE AMERICAN
83.4
67.1
□ 1990
▨ 1980
0
22
44
66
88
NUMBER OF DEATHS PER 100,000 POPULATION

Adolescent Mortality

The 260,922 adolescents (15 to 19 year olds) residing in Arizona in 1990 comprised a smaller fraction of the total population than their counterparts in 1980 did (7.1 and 9.3 percent respectively). The lives of 236 adolescents were prematurely ended in 1990 for a mortality rate of 90.5 per 100,000, 21 percent lower than the 1980 rate (Table 3-10). This reduction resulted in a 1990 total mortality rate that was 3 percent better than the the 1990 national objective of 93 deaths per 100,000 adolescents, although adolescents are defined as persons 15 to 24 years of age in the national objective rather the 15 to 19 year old age span used in this report.

Rates of adolescent death from unintentional injuries, homicide and cancer, three of the five leading causes, declined from 1980 to 1990 (Table 3-11). Unintentional injuries accounted for a smaller share of adolescent deaths in 1990 than in 1980 (52 and 57 percent respectively), although it still was the cause for the majority of deaths. More than 70 percent of unintentional injury deaths among adolescents were related to motor vehicles. The 1991 adolescent motor vehicle fatality rate was the lowest of the 11-year period, while the 1991 death rate for other unintentional injuries such as poisonings, falls and fires was not the lowest of the time period.

Adolescents were more likely to take their own lives in 1990 than in 1980. However, the 1990 suicide death rate was not the highest of the 11-year period. Suicide did make a larger proportional contribution to adolescent mortality in 1990 than in 1980, with percents of 18 and 11 respectively. Diseases of the heart accounted for only six adolescent deaths in 1990.

Gender Differences. The decline in total mortality from 1980 to 1990 was larger for adolescent females than males (Table 3-11, Figure 33). This increased the male to female ratio in total mortality rate from 3:1 in 1980 to 3.4:1 in 1990. In other words, the mortality risk for adolescent males compared to females was 3.4 times greater in 1990. If adolescent males had the same survival chances as adolescent females in 1990, 131 lives would have been saved.

Unintentional injuries accounted for the majority of deaths among adolescent males but not adolescent females. Motor vehicle-related injuries accounted for 92 percent of 1990 adolescent unintentional injury deaths among females but only 70 percent of these deaths among males. The low rate of death from unintentional injuries that were not related to motor vehicles among females in 1990 resulted in the very large male to female differential in mortality rate of 14:1, the largest for any leading cause of death.

The genders were similar in their increased suicide death rate from 1980 to 1990 but differed in the temporal change in death rate for cancer. Cancer death rates increased for males but declined for females. The genders also differed in the fifth leading cause of death in 1990. For males, it was diseases of the heart, while chronic obstructive pulmonary disease (COPD) was the fifth leading cause for females. Four adolescent females died from COPD in 1990, with three of those deaths due to asthma.

Geographic Differences. Total mortality rates declined by almost the same amount from 1980 to 1990 for both urban and rural adolescents (Table 3-12, Figure 34). However, the 1990 death rate of rural adolescents was 30 percent higher than the 1990 objective, while the mortality rate for urban adolescent was 12 percent better than the 1990 objective. Rural adolescents had a 49 percent greater chance of dying in 1990 than did urban adolescents.

Only suicide death rates increased by at least 20 percent among urban adolescents. In contrast, rural adolescents experienced at least this great an increase in death rates for suicide, cancer and diseases of the heart. Urban adolescents had a greater mortality risk than rural adolescents from only one of the five leading causes of death, namely homicide. The 1990 homicide death rate was 78 percent higher for urban than rural adolescents.

In contrast, rural compared to urban adolescents were at greater risk of death from each of the four other leading causes (and the component parts in the case of unintentional injuries). Relative to urban adolescents, rural adolescents had a 570 percent greater risk of death from heart disease, a 86 percent greater risk of death from unintentional injuries (64 percent for motor vehicle related and 164 percent for other than motor vehicle), a 67 percent greater risk of death from cancer, and a 36 percent greater risk to commit suicide.

Total mortality rates declined the least from 1980 to 1990 among rural female adolescents and the most among urban female adolescents (Table 3-13). In 1980, rural female adolescents had a slighly lower death rate than their urban counterparts. By 1990, rural female adolescents were 43 percent more likely to die than their urban peers. Rural male adolescents had better survival chances in 1985 than in 1990, the only group showing this pattern. Indeed, females in both regions had worst mortality rates in 1985 than in 1980, but improvement was recorded by 1990. Rural males remained the most disadvantaged group in terms of survival chances through adolescence and into early adulthood.

Ethnic Differences. Decreases from 1980 to 1990 in total mortality rates were seen for white non-Hispanic, Hispanic and Black adolescents but not for Native American adolescents (Table 3-14, Figure 35). Black adolescents had the largest decline in total mortality, followed by Hispanic adolescents and white non-Hispanic adolescents. Native American adolescents had worse survival chances in 1990 than in 1980.

Because of differences in the size of the decline, the rank-order among the four ethnic groups in survival chances changed from 1980 to 1990. From best to worst survival chances, the 1980 rank-order was white non-Hispanic, Hispanic, Black and Native American. The rank order in 1990 was Hispanic, Black, white non-Hispanic and Native American. In addition, the lack of improvement in mortality from all causes among Native Americans enlarged the inequality between them and each of the other ethnic groups. In 1980, the largest exceedance between the mortality risk of Native Americans and the mortality risk of another ethnic group was 88 percent, while the smallest was 2 percent. In 1990, the risk of death among Native American adolescents was 139 percent greater than among white non-Hispanics, 190 percent greater than among Blacks, and 216 percent greater than among Hispanics. If the 1990 total mortality rate for Native American adolescents applied to adolescents in the three other ethnic groups, 499 white non-Hispanic, Hispanic or Black adolescents would have died rather than the 193 who actually died.

Unintentional injuries, suicide and homicide comprised the three leading causes for each ethnic group. However, suicide ranked second for white non-Hispanics and Native Americans, while homicide ranked second for Hispanics and Blacks. Unintentional injury death rates were highest among Native Americans, with the 1990 rate for this group higher than the 1980 rate and at least 37 percent greater than the 1990 total mortality rate for each other ethnic group. Vehicular events accounted for 100 percent of unintentional injuries among Blacks, 86 percent of these injuries among Hispanics, 72 percent of these injuries among white non-Hispanics, and 67 percent of unintentional injuries among Native American adolescents.

Suicide death rates increased by 60 percent among Native Americans and by 38 percent among white non-Hispanics, while declining among Hispanics and Blacks. In 1990, Native American adolescents were twice as likely to commit suicide as white non-Hispanic adolescents and almost nine times more likely than Hispanic adolescents. Homicide death rates declined from 1980 to 1990 by 63 percent for Black adolescents compared to only 9 percent for Hispanic adolescents. Thus, in 1990, homicide death rates were nearly identical for these two ethnic groups and almost twice as large as the rate of homicide deaths among either white non-Hispanics or Native Americans.

TABLE 3-11

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ADOLESCENTS (15-19 years) BY GENDER, ARIZONA, 1980, 1985 AND 1990

Gender/Cause	1980	1985	1990	Percent Change from 1980
MALE				
Unintentional injuries	100.6	78.6	73.7	-26.7
Motor vehicle-related	68.6	66.8	51.4	-25.1
Other than motor vehicle	32.0	11.8	22.3	-30.3
Suicide	23.4	26.2	26.1	+11.5
Homicide	23.4	9.3	17.9	-23.5
Malignant neoplasms	3.9	10.2	4.5	+15.4
Diseases of heart	1.6	2.5	4.5	+181.3
ALL CAUSES	170.7	146.4	137.8	-19.3
(Number of all deaths)	(219)	(173)	(185)	(-15.5)
FEMALE				
Unintentional injuries	28.2	44.0	19.7	-30.1
Motor vehicle-related	23.4	37.2	18.2	-22.2
Other than motor vehicle	4.8	6.8	1.6	-66.7
Suicide	3.2	8.5	5.5	+71.9
Homicide	3.2	6.8	3.2	0.0
Malignant neoplasms	7.3	4.2	2.4	-67.1
Chronic Obstructive Pulmonary Disease	0.8	-	3.2	+300.0
ALL CAUSES	56.6	74.5	40.3	-28.8
(Number of all deaths)	(70)	(88)	(51)	(-27.1)
TOTAL				
Unintentional injuries	65.0	61.3	47.5	-26.9
Motor vehicle-related	46.4	52.0	35.3	-23.9
Other than motor vehicle	18.6	9.3	12.2	-34.4
Suicide	13.5	17.3	16.1	+19.3
Homicide	13.5	8.0	10.7	-20.7
Malignant neoplasms	5.6	7.2	3.5	-37.5
Diseases of heart	1.6	3.0	2.3	+43.8
ALL CAUSES	114.7	110.4	90.5	-21.1
(Number of all deaths)	(289)	(261)	(236)	(-18.3)

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[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

TABLE 3-12

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ADOLESCENTS (15-19 years) IN URBAN AND RURAL AREAS,[3] ARIZONA, 1980, 1985 AND 1990

Area/Cause	1980	1985	1990	Percent Change from 1980
URBAN				
Unintentional injuries	56.9	56.8	39.7	-30.2
Motor vehicle-related	40.8	47.6	30.8	-24.5
Other than motor vehicle	16.1	9.2	8.9	-44.7
Suicide	12.4	21.8	14.9	+20.2
Homicide	11.3	6.3	11.9	+5.3
Malignant neoplasms	6.4	4.0	3.0	-53.1
Diseases of heart	1.6	2.9	1.0	-37.5
ALL CAUSES	102.6	103.3	81.4	-20.7
(Number of all deaths)	(191)	(180)	(164)	(-14.1)
RURAL				
Unintentional injuries	88.0	74.0	73.9	-16.0
Motor vehicle-related	62.2	64.4	50.4	-19.0
Other than motor vehicle	25.8	9.6	23.5	-8.9
Suicide	16.7	4.8	20.2	+21.0
Homicide	19.7	12.9	6.7	-66.0
Malignant neoplasms	3.0	16.1	5.0	+66.7
Diseases of heart	1.5	3.2	6.7	+346.7
ALL CAUSES	148.6	130.4	121.0	-18.6
(Number of all deaths)	(98)	(81)	(72)	(-26.5)
STATEWIDE				
Unintentional injuries	65.0	61.3	47.5	-26.9
Motor vehicle-related	46.4	52.0	35.3	-23.9
Other than motor vehicle	18.6	9.3	12.2	-34.4
Suicide	13.5	17.3	16.1	+19.3
Homicide	13.5	8.0	10.7	-20.7
Malignant neoplasms	5.6	7.2	3.5	-37.5
Diseases of heart	1.6	3.0	2.3	+43.8
ALL CAUSES	114.7	110.4	90.5	-21.1
(Number of all deaths)	(289)	(261)	(236)	(-18.3)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths.

[3] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-13

MORTALITY RATES[1] AMONG ADOLESCENTS (15-19 years) BY GENDER IN URBAN AND RURAL AREAS,[2] ARIZONA, 1980, 1985 AND 1990

Area/Gender	1980	1985	1990	% Change from 1980
Urban				
Male	147.0	135.7	123.8	-15.8
Female	56.8	70.5	36.7	-35.4
Total	102.6	103.3	81.4	-20.7
Rural				
Male	237.3	177.1	184.4	-22.3
Female	55.8	85.3	52.4	-6.1
Total	148.6	130.4	121.0	-18.6
Statewide				
Male	170.7	146.4	137.8	-19.3
Female	56.6	74.5	40.3	-28.8
Total	114.7	110.4	90.5	-21.1

[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

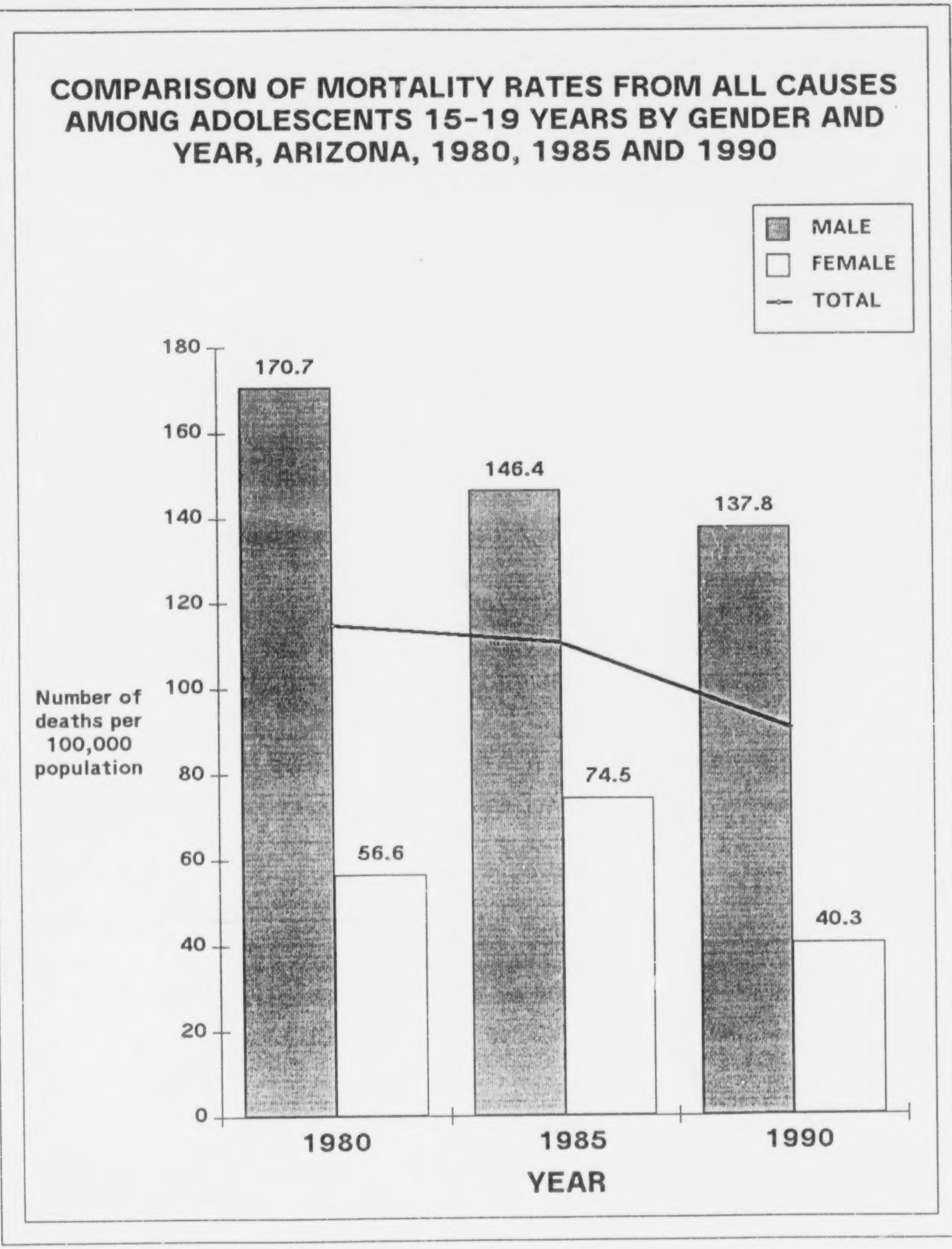
TABLE 3-14

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG ADOLESCENTS (15-19 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Unintentional injuries	60.9	46.7	-23.3
	Motor vehicle-related	43.3	33.6	-22.4
	Other than motor vehicle	17.6	13.1	-25.6
	Suicide	13.5	18.7	+38.5
	Homicide	4.7	6.8	+44.7
	Malignant neoplasms	7.6	4.4	-42.1
	Diseases of heart	2.3	2.5	+8.7
	ALL CAUSES	104.3	88.3	-15.3
	(Number of all deaths)	(178)	(142)	(-20.2)
Hispanic	Unintentional injuries	55.0	31.9	-42.0
	Motor vehicle-related	39.3	27.3	-30.5
	Other than motor vehicle	15.7	4.6	-70.7
	Homicide	21.6	19.7	-8.8
	Suicide	9.8	4.6	-53.1
	Malignant neoplasms	7.8	1.5	-80.8
	Diabetes	-	1.5	NA
	ALL CAUSES	106.1	66.8	-37.0
	(Number of all deaths)	(54)	(44)	(-18.5)
Black	Unintentional injuries	101.9	41.7	-59.1
	Motor vehicle-related	68.0	41.7	-38.7
	Other than motor vehicle	34.0	-	-100.0
	Homicide	56.6	20.8	-63.3
	Suicide	11.3	10.4	-8.0
	ALL CAUSES	192.5	72.9	-62.1
	(Number of all deaths)	(17)	(7)	(-58.8)
Native American	Unintentional injuries	110.4	120.6	+9.0
	Motor vehicle-related	80.3	80.4	+0.1
	Other than motor vehicle	30.3	40.2	+32.7
	Suicide	25.1	40.2	+60.2
	Homicide	25.1	10.1	-59.8
	Diseases of heart	-	10.1	NA
	ALL CAUSES	195.7	211.1	+7.9
	(Number of all deaths)	(39)	(42)	(+7.7)
Total: All Ethnic Groups[3]	Unintentional injuries	65.0	47.5	-26.9
	Motor vehicle-related	46.4	35.3	-23.9
	Other than motor vehicle	18.6	12.2	-34.4
	Suicide	13.5	16.1	+19.3
	Homicide	13.5	10.7	-20.7
	Malignant neoplasms	5.6	3.5	-37.5
	Diseases of heart	1.6	2.3	+43.8
	ALL CAUSES	114.7	90.5	-21.1
	(Number of all deaths)	(289)	(236)	(-18.3)

[1] Leading causes are based on 1990 vital records.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

FIGURE 33.



COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ADOLESCENTS 15-19 YEARS BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990

FIGURE 34.

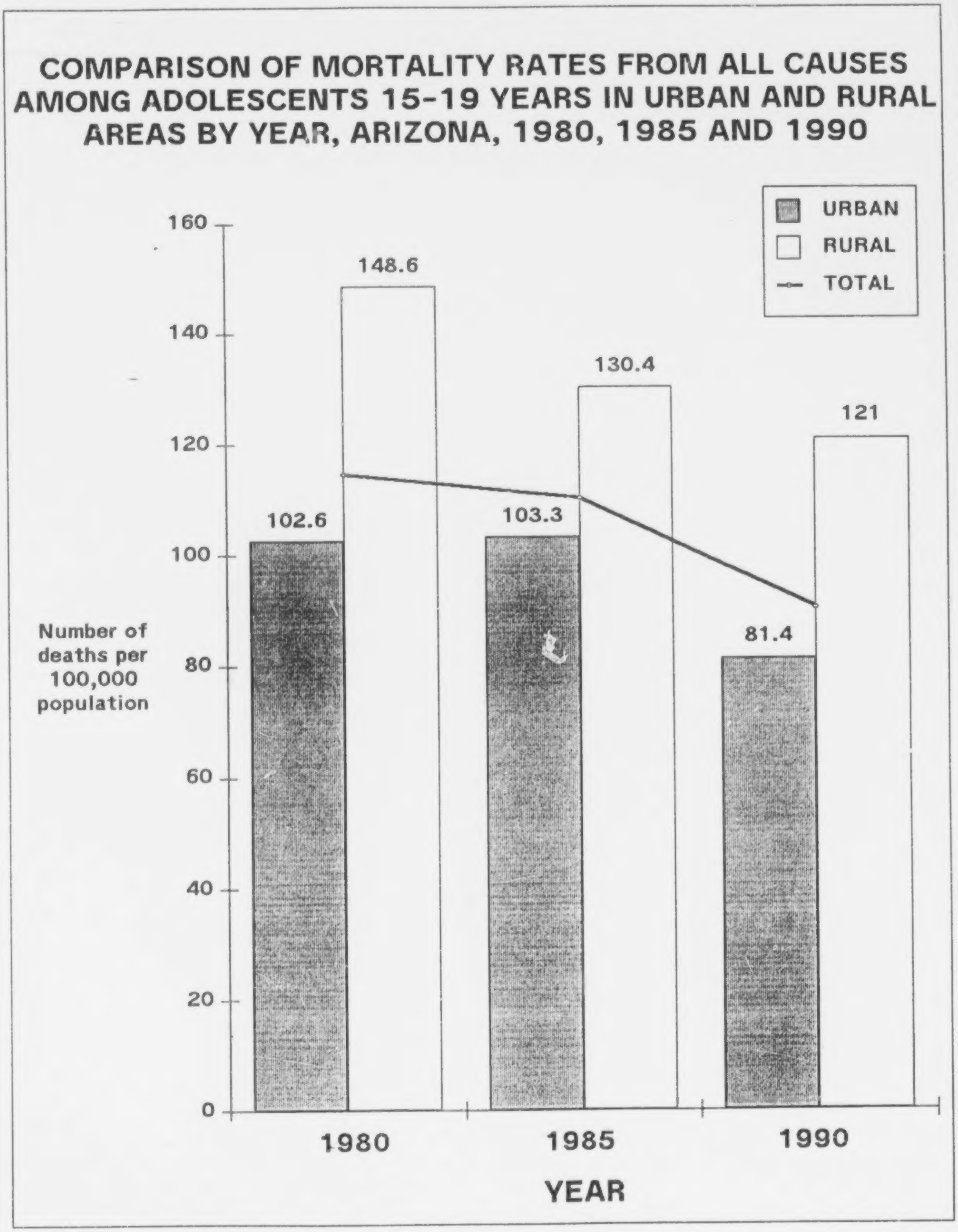
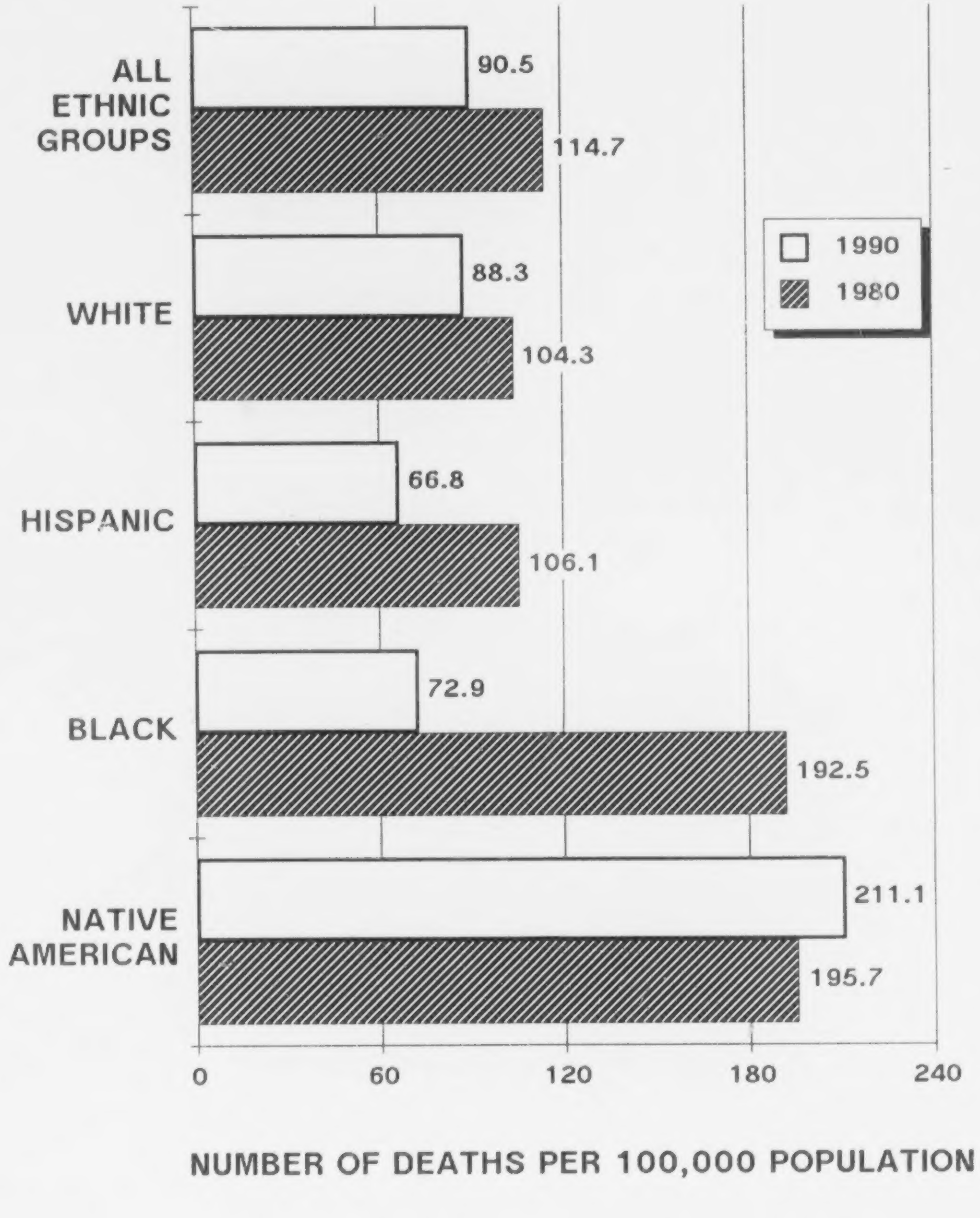

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ADOLESCENTS 15-19 YEARS IN URBAN AND RURAL AREAS BY YEAR, ARIZONA, 1980, 1985 AND 1990
URBAN
RURAL
TOTAL
Number of deaths per 100,000 population
160
140
120
100
80
60
40
20
0
148.6
102.6
130.4
103.3
121
81.4
1980
1985
1990
YEAR

FIGURE 35.

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ADOLESCENTS 15-19 YEARS BY ETHNIC GROUP AND YEAR,ARIZONA 1980 AND 1990



Mortality of Young Adults

The population of young adults (20 to 44 year olds) grew 44 percent from 1980 to 1,443,528 individuals in 1990. The growth rate of this population exceeded the 30 percent increase in the number of young adult deaths from 1,768 in 1980 to 2,296 in 1990 (Table 3-15). Thus, the 1990 young adult total mortality rate of 159.1 per 100,000 was 10 percent lower than the 1980 rate. However, the 1990 total mortality rate for young adults was at least 3 percent higher than the mortality rates in 1985 and 1989.

The decade of the 1990s began with Human Immunodeficiency Virus (HIV) infection now one of the five leading causes of death for young adults (Table 3-15). The epidemic that began in 1981 progressed to the point that in 1990 HIV infection displaced heart disease as the fifth leading cause of young adult death. Heart disease death rates declined during the 1980s and promised to decline in this decade. Unfortunately, the best estimate is that HIV infection death rates will progressively increase in the future. In 1990, HIV infection was responsible for 8 percent of young adult deaths.

The decline in unintentional injury mortality rates from 1980 to 1990 largely accounted for the improved survival chances of this age group. In turn, almost all of the decrease in young adult deaths from unintentional injuries was due to the 35 percent decrease in mortality from the motor vehicle related component. In 1980, motor vehicle inflicted fatal injuries accounted for 71 percent of unintentional injury deaths compared to 62 percent in 1990. In contrast, other unintentional injuries such as poisonings, falls and fires occurred at almost the same rate in 1990 as in 1980, so their proportional share of unintentional injury deaths went from 29 percent in 1980 to 38 percent in 1990.

The two types of intentional injuries showed opposite temporal trends, with suicide slightly increasing and homicide declining in rate. The 1990 suicide death rate was not the highest annual rate and the 1990 homicide death rate was not the lowest annual rate of the 11-year period.

Death rates for cancer, the third leading cause of young adult death, reached a low in 1989 and then returned in 1990 to a level similar to that seen in 1980. An annual cancer death rate of about 20 per 100,000 young adults has characterized the majority of the eleven years from 1980 to 1990.

Gender Differences. The most striking difference in 1990 between the two genders was that HIV infection was the third leading cause of death of males but not among the five leading causes of death for females (Table 3-15). Males accounted for 95 percent of the HIV infection deaths among young adults. The significant introduction of this disease into the mortality profile for males but not for females impacted the total mortality risk pattern through time of the two genders. Total mortality rates declined 6.2 times more for females than for males from 1980 to 1990 (Figure 36). If the HIV infection epidemic had not occurred, male total mortality rates could have fallen 14 percent rather than 4 percent. The male to female differential in mortality risk thus increased from 2.1 times greater for males in 1980 to 2.6 times greater for males in 1990.

Suicide and cancer death rates also increased among young adult males. Moreover, the 1990 male young adult suicide mortality rate was the highest of the 11-year period. It is possible that the rising male suicide death rate is another manifestation of the HIV infection epidemic, with infected and ill persons more likely to commit suicide.

In contrast, not only death rates for suicide and cancer but also death rates for the other three leading causes decreased from 1980 to 1990 among young adult females. Young adult female mortality rates for heart disease declined the most, followed by homicide, suicide, unintentional injuries and cancer. Young adult males also experienced a decline in death rates for unintentional injuries of almost the same magnitude as the decline for females. However, the decrease from 1980 to 1990 in the male homicide death rate was 50 percent less than the decrease seen for females.

Geographic Differences. The mortality disadvantage of rural compared to urban young adults did not diminish, but instead slightly increased from 1980 to 1990 (Table 3-16, Figure 37). Rural young adults were 34 percent more likely to die than their urban peers in 1990 compared to 31 percent more likely in 1980. Geographic inequity in survival chances widened, despite the fact that 95 percent of deaths from HIV infection were among urban young adults. HIV infection became the fourth leading cause of death among urban young adults in 1990, moving ahead of both heart disease and homicide. In contrast, alcoholism not HIV infection was among the five leading causes of death for rural young adults.

A major contributor to the greater inequity of rural compared to urban young adults was the fact that the decline in the rate of mortality from unintentional injuries was 62 percent less for rural relative to urban young adults. Moreover, the vehicular fatality rate decreased six times more for urban young adults than their rural peers. Thus, while in 1980 rural compared to young adults were at a 50 percent higher risk to die from a fatal injury in a vehicular event, by 1990 they were at a 137 percent higher risk.

The suicide death rate was higher for rural relative to urban young adults in 1990 as it was in 1980. Cancer death rates increased substantially for rural young adults as they declined by a moderate amount for urban young adults. In 1980, the cancer mortality disadvantage for urban relative to rural adults was 65 percent. By 1990, the cancer mortality rates for the two groups were virtually indistinguishable. The 1990 homicide death rates for young adults in both regions also barely differed.

Given that death from HIV infection was predominantly an urban male phenomenon from 1981 to 1990, it was not surprising that the 1990 total mortality rate for urban males was nearly identical to the 1980 rate (Table 3-17). Increases in HIV infection mortality (and other related mortalities such as suicide) probably offset declines in other major causes of death typical of urban residents. Urban females clearly were the major beneficiaries of the urban cause-specific declines as evidenced by the 25 percent improvement in their survival chances from 1980 to 1990. Rural females made only about one-half the progress that urban females did, so their mortality disadvantage grew from a 22 percent greater mortality risk in 1980 to a 42 percent greater mortality risk in 1990. Improvement in survival chances for rural males was slight, so they remained the most disadvantaged among the area by gender groups in 1990.

Ethnic Differences. The rank order of survival chances from best to worse by ethnicity was the same in 1990 as in 1980, namely Hispanics, white non-Hispanics, Blacks, and Native Americans (Figure 38). Total mortality rates for Black and white non-Hispanic young adults declined by almost the same amount from 1980 to 1990 (Table 3-18). Relative to these two ethnic groups, total mortality rates decreased twice as much for Hispanics and four times more for Native Americans. The greater decline for Native Americans reduced the disparity in mortality risk between them and white non-Hispanics from 208 percent greater in 1980 to 141 percent greater in 1990. The Black to white non-Hispanic disparity remained about the same at over a 40 percent greater mortality risk for Blacks. Hispanics became more advantaged with respect to white non-Hispanics in 1990 compared to 1980, with a 14 and 8 percent lower mortality risk respectively.

The five leading causes of death differed among the ethnic groups, with the rank-order of common causes also differing. Unintentional injuries was the top leading cause of death except in the case of Blacks, when it was ranked second. Death rates for unintentional injuries declined 28 percent for white non-Hispanics and Hispanics, 18 percent for Blacks, but only 13 percent for Native Americans. Moreover, the motor vehicle component dropped almost the same amount (40 percent) for the first three ethnic groups, but the drop was 64 percent less for Native Americans. Native Americans were at least 4.5 times more likely to be fatally injured in a vehicular event in 1990 than any other ethnic group.

Suicide, the second leading cause of death for white non-Hispanics, ranked fourth for Hispanics and third for Blacks and Native Americans. Death rates for suicide declined for Hispanics and Native Americans, while they increased for white non-Hispanics and Blacks. Native American young adults were most likely to commit suicide in 1980 and 1990, but Blacks occupied the second most likely position in 1990, the position held by white non-Hispanics in 1980. Hispanics were least likely to kill themselves in both years.

Cancer was among the five leading causes of death only for white non-Hispanics and Hispanics and it ranked third for both ethnic groups. The cancer death rate for white non-Hispanics showed less than one percent change from 1980 to 1990. In contrast, a 52 percent increase occurred in the cancer death rate for Hispanics. Nonetheless, white non-Hispanics were at higher risk for cancer death than Hispanics in both years.

HIV infection became a leading cause of death not for Native Americans but for white non-Hispanics, Hispanics and Blacks in 1990, ranking fourth, fifth and fifth respectively. The HIV infection mortality rate was highest for Blacks, followed by white non-Hispanics and Hispanics. Blacks were 29 more likely to die from HIV infection than white non-Hispanics and 138 percent more likely than Hispanics.

Except for white non-Hispanics, homicide was a leading cause of death that ranked first for Blacks, second for Hispanics, and fourth for Native Americans. Black young adults were 40 percent more likely to be murdered in 1990 than in 1980, while the risk of murder declined by at least 16 percent for the other two ethnic groups. Hispanics had the lowest 1990 homicide death rate. Relative to them, the risk of death by homicide was 3.1 times higher for Blacks and 1.7 times higher for Native Americans.

Heart disease was a leading cause of death for white non-Hispanics and Native Americans and ranked fifth in both instances. Rates of death from heart disease declined for both ethnic groups, with the decline nearly twice as large for Native Americans compared to white non-Hispanics. Native American young adults were at higher risk to die from heart disease than their white non-Hispanic peers in both years.

TABLE 3-15

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG YOUNG ADULTS (20-44 years) BY GENDER, ARIZONA, 1980, 1985 AND 1990

Gender/Cause	1980	1985	1990	Percent Change from 1980
MALE				
Unintentional injuries	97.3	80.5	70.8	-27.2
Motor vehicle-related	66.8	55.5	41.9	-37.3
Other than motor vehicle	30.5	25.0	28.8	-5.6
Suicide	35.9	34.5	40.3	+12.3
HIV infection	NA	NA	23.8	NA
Homicide	23.8	18.4	20.2	-15.1
Malignant neoplasms	16.0	17.8	18.3	+14.4
ALL CAUSES	238.0	219.0	229.1	-3.7
(Number of all deaths)	(1201)	(1377)	(1677)	(+39.6)
FEMALE				
Unintentional injuries	27.2	21.1	20.2	-25.7
Motor vehicle-related	20.8	15.8	14.8	-28.9
Other than motor vehicle	4.4	5.3	5.5	+25.0
Malignant neoplasms	24.6	17.5	21.7	-11.8
Suicide	9.8	8.8	7.2	-26.5
Diseases of heart	8.4	6.1	5.8	-31.0
Homicide	8.6	6.1	6.0	-30.2
ALL CAUSES	113.2	85.5	87.0	-23.1
(Number of all deaths)	(567)	(531)	(619)	(+9.2)
TOTAL				
Unintentional injuries	61.3	51.0	45.9	-25.1
Motor vehicle-related	43.8	35.8	28.5	-34.9
Other than motor vehicle	17.5	15.2	17.3	-1.1
Suicide	22.9	21.8	24.0	+4.8
Malignant neoplasms	20.3	17.7	20.0	-1.5
Homicide	16.2	12.3	13.2	-18.5
HIV infection	NA	NA	12.7	NA
ALL CAUSES	175.8	152.7	159.1	-9.5
(Number of all deaths)	(1768)	(1908)	(2296)	(+29.9)

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[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

TABLE 3-16

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG YOUNG ADULTS (20-44 years) IN URBAN AND RURAL AREAS,[3] ARIZONA, 1980, 1985 AND 1990

Area/Cause	1980	1985	1990	Percent Change from 1980
URBAN				
Unintentional injuries	52.6	41.0	38.0	-27.8
Motor vehicle-related	39.3	30.2	22.8	-42.0
Other than motor vehicle	13.3	10.8	15.2	+14.3
Suicide	22.2	20.9	23.7	+4.4
Malignant neoplasms	22.3	17.6	20.0	-10.3
HIV infection	NA	NA	14.7	NA
Homicide	15.7	12.3	13.1	-16.6
ALL CAUSES	164.1	138.6	149.8	-8.7
(Number of all deaths)	(1273)	(1351)	(1767)	(+38.8)
RURAL				
Unintentional injuries	90.8	86.5	81.1	-10.7
Motor vehicle-related	59.1	55.6	54.2	-8.3
Other than motor vehicle	31.7	30.9	26.9	-15.1
Suicide	25.2	24.7	25.0	-0.8
Malignant neoplasms	13.5	17.8	19.7	+45.9
Homicide	17.8	12.4	13.7	-23.0
Alcoholism	15.6	16.7	12.1	-13.0
ALL CAUSES	215.3	202.4	200.5	-6.9
(Number of all deaths)	(495)	(557)	(529)	(+6.9)
STATEWIDE				
Unintentional injuries	61.3	51.0	45.9	-25.1
Motor vehicle-related	43.8	35.8	28.5	-34.9
Other than motor vehicle	17.5	15.2	17.3	-1.1
Suicide	22.9	21.8	24.0	+4.8
Malignant neoplasms	20.3	17.7	20.0	-1.5
Homicide	16.2	12.3	13.2	-18.5
HIV infection	NA	NA	12.7	NA
ALL CAUSES	175.8	152.7	159.1	-9.5
(Number of all deaths)	(1768)	(1908)	(2296)	(+29.9)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

[3] Prior to 1990, Maricopa and Pima Counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classififed as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-17

MORTALITY RATES[1] AMONG YOUNG ADULTS (20-44 years) BY GENDER IN URBAN AND RURAL AREAS,[2] ARIZONA, 1980, 1985 AND 1990

Area/Gender	1980	1985	1990	% Change from 1980
Urban				
Male	220.3	197.8	217.0	-1.5
Female	107.7	78.2	80.8	-25.0
Total	164.1	138.6	149.8	-8.7
Rural				
Male	297.1	295.6	283.1	-4.7
Female	131.8	110.9	115.0	-12.8
Total	215.3	202.4	200.5	-6.9
Statewide				
Male	238.0	219.0	229.1	-3.7
Female	113.2	85.5	87.0	-23.1
Total	175.8	152.7	159.1	-9.5

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[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-18

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG YOUNG ADULTS (20-44 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Unintentional injuries	55.0	39.4	-28.4
	Motor vehicle-related	39.1	23.5	-39.9
	Other than motor vehicle	15.9	15.8	-0.6
	Suicide	22.8	26.2	+14.9
	Malignant neoplasms	22.3	22.2	-0.5
	HIV infection	NA	14.7	NA
	Diseases of heart	14.0	12.0	-14.3
	ALL CAUSES	160.0	150.9	-5.7
	(Number of all deaths)	(1,204)	(1,536)	(+27.6)
Hispanic	Unintentional injuries	56.7	41.0	-27.7
	Motor vehicle-related	43.5	26.1	-40.1
	Other than motor vehicle	13.1	14.1	+7.6
	Homicide	23.0	19.2	-16.5
	Malignant neoplasms	11.2	17.0	+51.8
	Suicide	18.0	13.1	-27.2
	HIV infection	NA	8.0	NA
	ALL CAUSES	146.9	130.5	-11.2
	(Number of all deaths)	(236)	(360)	(+52.5)
Black	Homicide	42.2	59.1	+40.1
	Unintentional injuries	38.7	31.7	-18.1
	Motor vehicle-related	21.1	12.7	-39.8
	Other than motor vehicle	17.6	19.0	+8.0
	Suicide	17.6	27.5	+56.3
	Diseases of heart	21.1	21.1	0.0
	HIV infection	NA	19.0	NA
	ALL CAUSES	228.5	213.3	-6.7
	(Number of all deaths)	(65)	(101)	(+55.4)
Native American	Unintentional injuries	192.9	168.3	-12.8
	Motor vehicle-related	136.4	116.6	-14.5
	Other than motor vehicle	56.5	51.7	-8.5
	Alcoholism	85.8	46.4	-45.9
	Suicide	40.9	34.5	-15.7
	Homicide	39.0	31.8	-18.5
	Diseases of heart	19.5	14.6	-25.1
	ALL CAUSES	493.2	363.2	-26.4
	(Number of all deaths)	(253)	(276)	(+9.1)
Total: All Ethnic Groups[3]	Unintentional injuries	61.3	45.9	-25.1
	Motor vehicle-related	43.8	28.5	-34.9
	Other than motor vehicle	17.5	17.3	-1.1
	Suicide	22.9	24.0	+4.8
	Malignant neoplasms	20.3	20.0	-1.5
	Homicide	16.2	13.2	-18.5
	HIV infection	NA	12.7	NA
	ALL CAUSES	175.8	159.1	-9.5
	(Number of all deaths)	(1,768)	(2,296)	(+29.9)

[1] Leading causes are based on 1990 vital records.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

FIGURE 36.

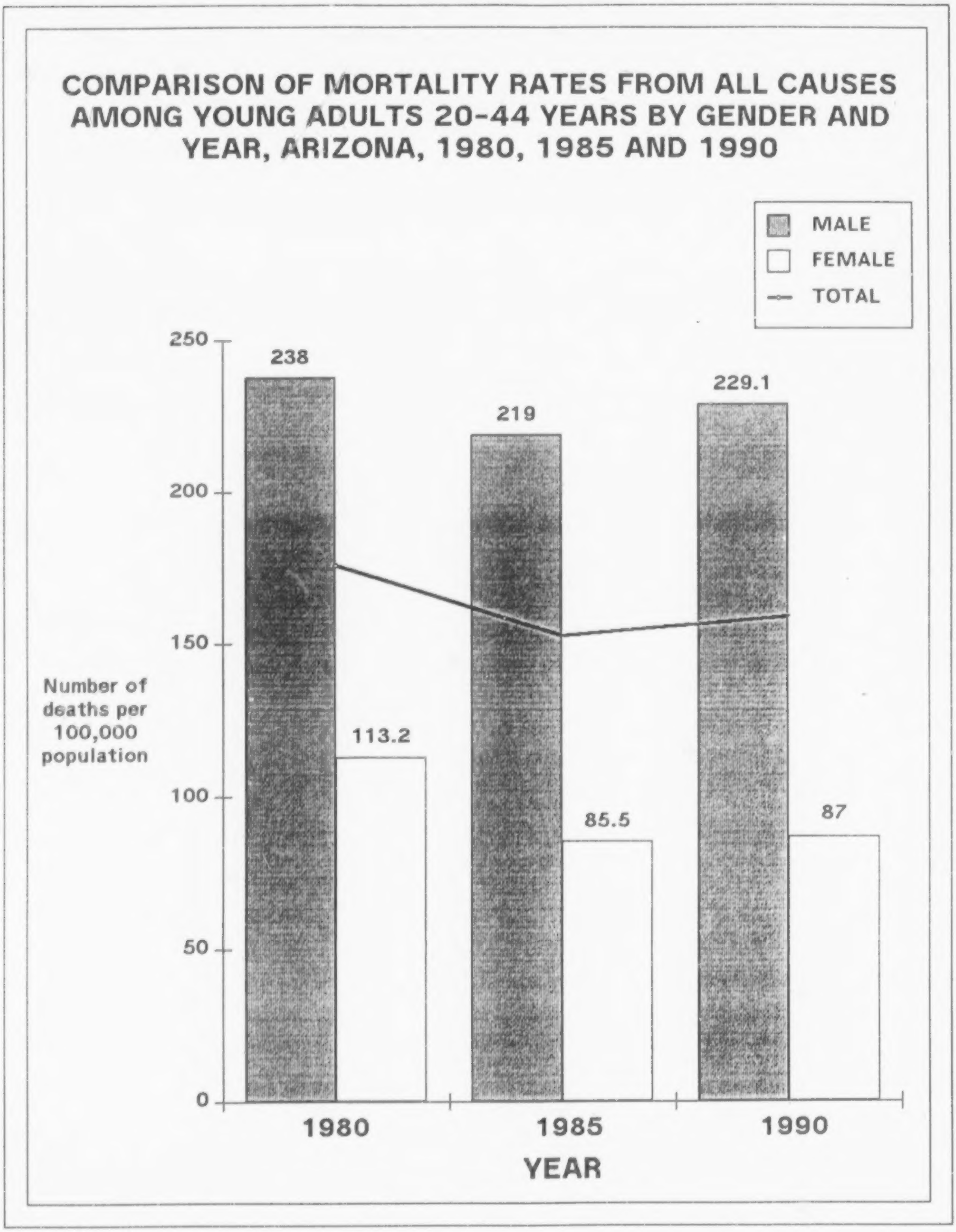
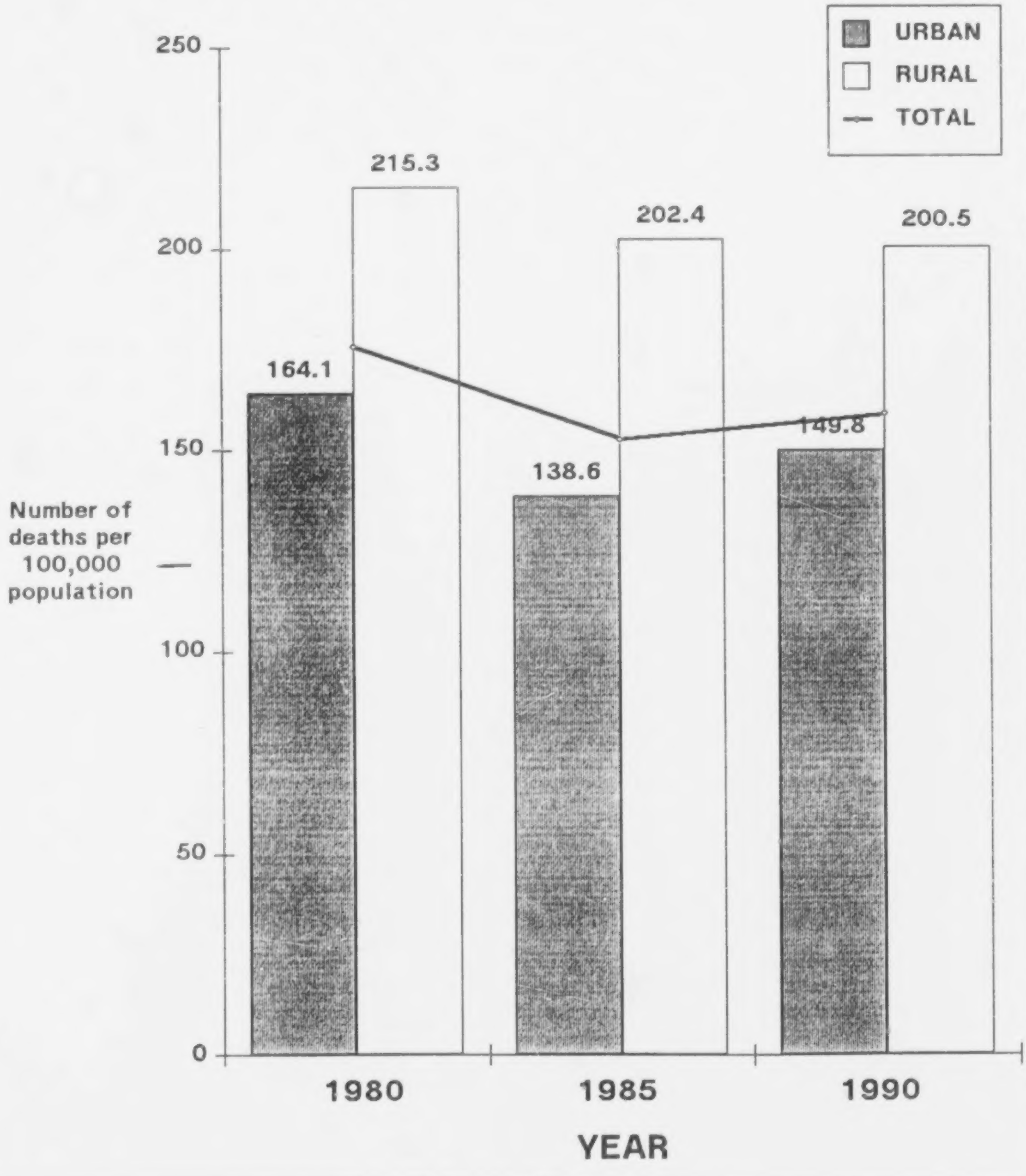

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG YOUNG ADULTS 20-44 YEARS BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990
MALE
FEMALE
TOTAL
Number of deaths per 100,000 population
250
200
150
100
50
0
238
113.2
219
85.5
229.1
87
1980
1985
1990
YEAR

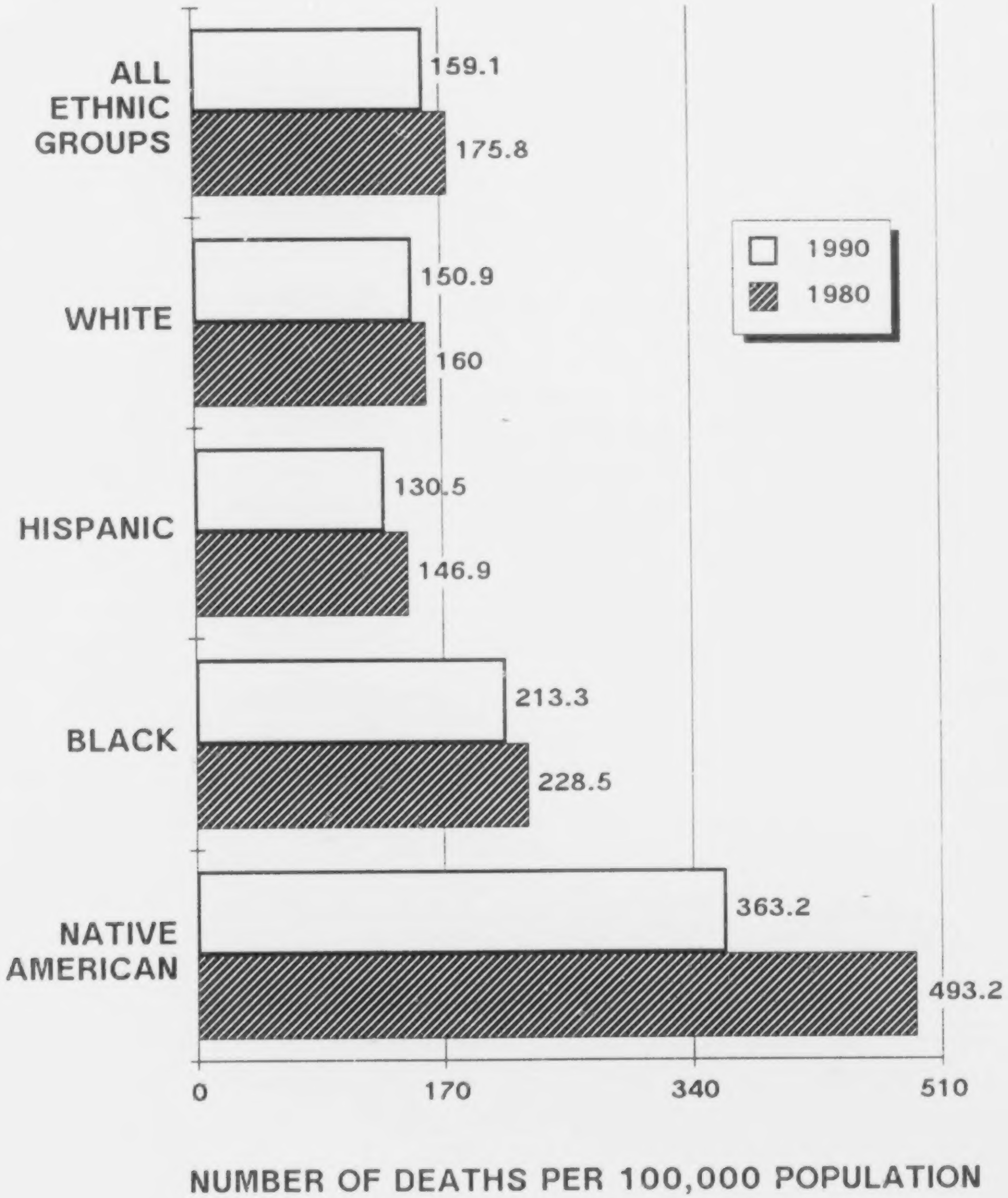
FIGURE 37.



COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG YOUNG ADULTS 20-44 YEARS IN URBAN AND RURAL AREAS BY YEAR, ARIZONA, 1980, 1985 AND 1990

FIGURE 38.

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG YOUNG ADULTS 20-44 YEARS BY ETHNIC GROUP AND YEAR,ARIZONA 1980 AND 1990



Mortality of Middle-Aged Adults

A growth rate of 28 percent from 1980 increased the population of middle-aged adults (45 to 64 year olds) to 649,048 persons in 1990. The death of 4,766 middle-aged adults in 1990 resulted in the lowest total mortality rate of the 11-year period, 734.3 per 100,000, 20 percent below the 1980 rate (Table 3-19). One of every 136 middle-aged adults died in 1990 compared to a 1980 ratio of one death for every 109 adults.

During an average week in 1990, 31 middle-aged adults died of cancer, 24 died of heart disease, 5 were fatally injured unintentionally, 4 died of chronic obstructive pulmonary disease (COPD), 3 died of alcoholism and 24 died of all other causes. Cancer and heart disease each accounted for 31 percent of middle-aged adult deaths in 1980. By 1990, the proportion of deaths from cancer rose to 34 percent, while the proportion of deaths from heart disease fell to 26 percent (Table 3-19).

All leading cause-specific rates of death for middle-aged adults fell from 1980 to 1990. Heart disease, the second leading cause of death, had the largest decline, closely followed by the declines for chronic obstructive pulmonary disease (COPD), the fourth leading cause, and alcoholism, the fifth leading cause. The reduction of at least 28 percent from 1980 to 1990 in the death rates of these three causes resulted in the lowest mortality rate of the 11-year period for each in 1990.

The 1989 cancer death rate was the lowest annual rate of the 1980s and the 4 percent drop in the rate from 1989 to 1990 made the 1990 cancer mortality rate the lowest of the 11-year period. This was the third progressive annual reduction in the cancer mortality rate for middle-aged adults and may represent a true decline in the rate of death from this disease for this age group.

Although the 1990 unintentional injury death rate was lower than the 1980 rate, it represented no improvement over the generally lower annual rates during the last five years of the 1980s. Moreover, the 1990 vehicular fatality rate was at least 8 percent higher than any annual rate from 1985 to 1989. The improvement in the death rate from other unintentional injuries not related to motor vehicles occurred from 1980 to 1985. Since 1985 and including 1990, the annual mortality rate for other unintentional injuries generally has been about 16 per 100,000 middle-aged adults.

Gender Differences. Earlier trends seen during the 1980s suggested that the mortality profile of middle-aged males and females would radically differ in the future. Those suggestions appear to have become fact in 1990. The survival chances of middle-aged females deteriorated by 5 percent from 1980 to 1990, with the 1990 total mortality rate the highest annual rate of the 11 years. In very sharp contrast, the survival chances of middle-aged males improved by 22 percent from 1980 to 1990, with the 1990 total mortality rate the lowest of the 11-year period (Figure 39). In other words, middle-aged females were more likely to die prematurely in 1990 than they were in each of the past 10 years, while middle-aged males were less likely to die prematurely in 1990 than they were in each of the past 10 years.

Middle-aged males and females differed in their temporal trends of the four leading causes of death common to both, namely heart disease, cancer, COPD, and unintentional injuries. Heart disease death rates declined by 33 percent for males and reached the lowest level of the 11-year period in 1990. The decline in heart disease mortality rates for females was 84 percent less than the male decline, was a mere 5.5 percent, and represented a deterioration with respect to the annual rates from 1986 to 1989 which were all below 120 per 100,000 females.

Cancer claimed female lives at the highest level of the 11-year period in 1990. The male risk of dying from cancer in 1990, in contrast, was at the second lowest annual level of the 11 years, with only 1989 lower. These opposing trends in cancer mortality rates for males and females resulted in 1990 death rates which barely differed, while in 1980 the mortality risk for cancer was 18 percent greater for males than females.

COPD death rates declined from 1980 to 1990 for males by 48 percent and increased for females by 51 percent. In other words, opposite trends of nearly equal magnitude occurred, resulting in the 1990 COPD death rate for males being the 11-year low and the 1990 COPD death rate for females being the 11-year high. Another 1990 result was that females had a higher COPD death rate than males, a major reversal in status for females from their 65 percent lower rate in 1980. However, the reversal was predicted from the trend in the 1980s, e.g, the female advantage was down to 24 percent in 1985.

Opposing changes from 1980 to 1990 by gender also were seen for death rates for unintentional injuries and each of its two major subtypes. Females were 24 percent more likely to be fatally unintentionally injured in 1990 than in 1980, with the 1990 mortality rate the highest of the 11-year period. This major increase was almost exclusively due to the substantial 36 percent growth in the vehicular fatality rate for females, with that rate also the 11-year highest. These two rates, i.e. for unintentional injuries and its vehicular component, declined for males from 1980 to 1990, although both 1990 death rates were worse than their respective annual rates from 1985 to 1989.

The decline from 1980 to 1990 in the male alcoholism death rate also was substantial at 29 percent, with the 1990 mortality rate the lowest of the 11-year period. In contrast, while the 1990 cerebrovascular disease (stroke) death rate for females was 23 percent below the 1980 rate, it was greater than four of five annual rates from 1985 to 1989.

The observations above make it clear that no 1990 cause-specific mortality rate for middle-aged females represented a clear improvement over prior rates and, indeed, three causes were at the worst level of the 11-year period in 1990. As clearly, the majority of male declines in cause-specific mortality rates represented true improvements.

Geographic Differences. The decline from 1980 to 1990 in total mortality was twice as large for urban middle-aged adults than for their rural peers (Table 3-20, Figure 40). This contributed to the growing disparity in survival chances between middle-aged adults in the two regions over the 11-year period. In 1980, the mortality risk of rural compared to urban middle-aged adults was only 2 percent greater, in 1985 the risk was 8 percent greater, and by 1990 the risk was 17 percent greater.

Death rates declined by a minimum of 17 percent for cancer to a maximum of 34 percent for heart disease and COPD among urban adults. The temporal trends in these three leading causes of death were very different for rural adults. Rural adult cancer death rates increased slightly, COPD mortality rates decreased by only 12 percent, and rates of death from heart disease declined by 22 percent. In 1980, urban compared to rural adults were 28 percent more likely to die from cancer, 27 percent more likely to die from COPD, and only 1 percent less likely to die from heart disease. By 1990, the urban mortality disadvantage for cancer death was reduced to 5 percent, the urban mortality advantage regarding heart disease was increased to 16 percent, and rural rather than urban adults were more likely to die from COPD.

Opposing trends were noted in death rates for unintentional injuries, with these rates increasing by 19 percent among urban adults and decreasing by 25 percent among rural adults. The decline for rural adults was exclusively a function of the decrease in injuries not related to motor vehicles. Rates of death for both subtypes of unintentional injuries increased for urban adults, with the increase larger for motor vehicle related injuries. Despite the substantial decline in mortality from unintentional injuries among rural adults, the 1990 risk of death from this cause was 62 percent greater for rural than urban adults. However, this was an improvement over the 157 percent mortality disadvantage regarding unintentional injuries of rural relative to urban adults in 1980.

The fifth leading cause of death differed for adults in the two regions, with suicide occupying that position for rural adults and stroke doing likewise for urban adults. Rates of death for both causes decreased from 1980 to 1990. However, the decline in stroke death rates was 2.5 times greater than the decline in suicide death rates. Again, the temporal change favored urban over rural adults.

Urban middle-aged adult males and females showed almost the same magnitude of decline in total mortality rates from 1980 to 1990, with that magnitude more than three times greater than the decline in total mortality seen for rural middle-aged females (Table 3-21). From 1980 to 1990, rural relative to urban adult females went from a 8 percent lower mortality rate to a 9 percent greater mortality rate. The smaller decline in total mortality for rural than urban males also meant a larger difference in mortality risk, from 7 percent greater for rural in 1980 to 21 percent greater for rural in 1990. Rural middle-aged adult males consistently had the poorest survival chances.

Ethnic Differences. Total mortality rates declined from 1980 to 1990 by almost the same amount for white non-Hispanic, Hispanic and Black middle-aged adults, with that decline at least three times greater than the decline in total mortality recorded for Native American middle-aged adults (Table 3-21). Hispanic middle-aged adults had the best survival chances and white non-Hispanics the second best survival chances in both 1980 and 1990. Blacks had the worst survival chances in 1980, but because their mortality rates fell more than did Native Americans, Native Americans occupied the worst position in 1990 (Figure 41).

Three leading causes of death were common to all four ethnic groups, although their ranking within ethnic group differed. Cancer and heart disease were the first and second leading causes of death respectively for white non-Hispanics and Hispanics, while their rankings were reversed for Blacks and Native Americans. Unintentional injuries was the third leading cause of death for the three ethnic minority groups and the fourth leading cause for white non-Hispanics (Table 3-21).

Cancer death rates decreased from 1980 to 1990 by 19, 9 and 5 percent for white non-Hispanics, Blacks and Hispanics respectively, but increased by 42 percent for Native Americans. Despite these different changes, the rank-order of the ethnic groups on cancer mortality rates from highest to lowest remained the same in 1990 as it was in 1980: Black, white non-Hispanic, Hispanic and Native American. However, the differential in mortality rate between the highest and lowest group was reduced from a 2.8-fold ratio in 1980 to a 1.8-fold ratio in 1990. Nonetheless, the disparity between Blacks and white non-Hispanics in cancer mortality risk grew from 8 percent greater for Blacks in 1980 to 21 percent greater for Blacks in 1990.

Heart disease death rates fell for the same three ethnic groups that declined in cancer mortality but increased for Native Americans. In this instance, however, the rank-order among the ethnic groups also changed from 1980 to 1990. Blacks remained the highest group and Hispanics the lowest group in heart disease death rates in both years, but Native Americans in 1990 displaced white non-Hispanics from the second highest position held in 1980. Also unlike cancer, the difference between the highest and lowest group in death rate was about the same in both years at about a 2.5-fold ratio. In other words, Blacks were 2.5 times more likely to die from heart disease than Hispanics in both 1980 and 1990. The Black relative to white non-Hispanics mortality disadvantage in heart disease mortality grew from 1980 to 1990, going from an elevation in mortality risk of 52 percent to 68 percent respectively.

From 1980 to 1990, unintentional injury death rates remained stable for Native Americans, increased for white non-Hispanics by 15 percent, and declined for Hispanics and Blacks by 18 and 42 percent respectively. In both 1980 and 1990, Native Americans had the highest unintentional injury death rates, followed by Blacks, Hispanics and white non-Hispanics. Motor vehicle related injury death rates declined for all ethnic groups, the decrease varying from a low of 10 percent to a high of 38 percent. In contrast, injury death rates not related to motor vehicles increased for all groups, except Blacks, by a minimum of 10 percent to a maximum of 88 percent. In 1990, Native Americans were 3.7 times more likely to be fatally injured than white non-Hispanics, a reduction from the 4.2-fold greater risk in 1980. This reduction stemmed from the increased unintentional injury death rate for white non-Hispanics.

COPD was among the leading causes of death only for white non-Hispanics and Blacks, ranking third for the former and fifth for the latter. Death rates for COPD fell from 1980 to 1990 by 33 percent for white non-Hispanics, while they rose by 42 percent for Blacks. These opposing changes reversed the relative standing of the two ethnic groups. In 1980, white non-Hispanics were twice as likely as Blacks to die from COPD; by 1990, they were 4 percent less likely than Blacks to die from COPD.

Alcoholism was the fourth leading cause of death for Blacks and the fifth leading cause for Hispanics and Native Americans. Death rates for this cause decreased by a minimum of 40 percent to a maximum of 63 percent. In both 1980 and 1990, Native Americans had the highest alcoholism death rate, followed by Blacks, and Hispanics. In 1990, Native Americans were twice as likely to die from alcoholism as Blacks and 4.9 times more likely to die from this cause than Hispanics.

Diabetes was the fourth leading cause of death for both Hispanics and Native Americans. The risk of death from diabetes increased from 1980 to 1990 by 34 percent for Native Americans and by 72 percent for Hispanics. Native Americans were at higher risk to die from diabetes than Hispanics, with a 3.6 times higher rate in 1990.

White non-Hispanics were the only ethnic group with suicide as a leading cause of death, ranking fifth. The suicide death rate increased by 6 percent from 1980 to 1990.

TABLE 3-19

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 years) BY GENDER, ARIZONA, 1980, 1985 AND 1990

Gender/Cause	1980	1985	1990	Percent Change from 1980
MALE				
Diseases of heart	433.8	375.5	288.8	-33.4
Malignant neoplasms	310.4	302.8	281.7	-9.3
Chronic obstructive pulmonary disease	74.4	46.7	38.8	-47.9
Unintentional injuries	75.6	53.0	58.7	-22.4
Motor vehicle-related	39.0	31.5	34.3	-12.1
Other than motor vehicle	36.6	21.5	24.4	-33.3
Alcoholism	48.6	43.8	34.7	-28.6
ALL CAUSES	1215.4	1081.9	953.7	-21.5
(Number of all deaths)	(2925)	(2916)	(2972)	(+1.6)
FEMALE				
Malignant neoplasms	261.9	272.6	279.2	+6.6
Diseases of heart	142.9	122.8	135.0	-5.5
Chronic obstructive pulmonary disease	26.1	35.7	39.4	+51.0
Cerebrovascular diseases	38.0	25.4	29.1	-23.4
Unintentional injuries	25.0	21.9	31.0	+24.0
Motor vehicle-related	14.9	11.3	20.3	+36.2
Other than motor vehicle	10.1	10.6	10.7	+5.9
ALL CAUSES	651.7	638.5	686.0	+5.3
(Number of all deaths)	(1747)	(1862)	(1794)	(+2.7)
TOTAL				
Malignant neoplasms	284.8	287.1	247.8	-13.0
Diseases of heart	280.5	244.1	193.1	-31.2
Unintentional injuries	48.9	36.7	40.7	-16.8
Motor vehicle-related	26.3	20.8	24.7	-6.1
Other than motor vehicle	22.6	15.9	16.0	-29.2
Chronic obstructive pulmonary disease	48.9	41.0	34.5	-29.5
Alcoholism	33.6	30.5	24.2	-28.0
ALL CAUSES	918.4	851.5	734.3	-20.1
(Number of all deaths)	(4672)	(4778)	(4766)	(+2.0)

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[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

TABLE 3-20

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 years) BY URBAN AND RURAL AREAS,[3] ARIZONA, 1980, 1985 AND 1990

Area/Cause	1980	1985	1990	Percent Change from 1980
URBAN				
Malignant neoplasms	301.2	290.5	250.4	-16.9
Diseases of heart	279.5	240.9	185.1	-33.8
Chronic obstructive pulmonary disease	51.8	43.4	34.3	-33.8
Unintentional injuries	29.9	29.8	35.7	+19.4
Motor vehicle-related	16.1	17.4	19.9	+23.6
Other than motor vehicle	13.8	12.4	15.7	+13.8
Cerebrovascular diseases	37.6	29.8	21.3	-43.4
ALL CAUSES	913.7	835.0	707.5	-22.6
(Number of all deaths)	(3495)	(3556)	(3552)	(+1.6)
RURAL				
Malignant neoplasms	235.3	276.5	238.8	+1.5
Diseases of heart	283.6	254.3	220.4	-22.3
Unintentional injuries	76.8	58.4	57.8	24.7
Motor vehicle-related	41.2	31.8	40.8	-1.0
Other than motor vehicle	35.6	26.6	17.1	-52.0
Chronic obstructive pulmonary disease	40.4	33.3	35.4	-12.4
Suicide	38.0	25.9	31.3	-17.6
ALL CAUSES	932.4	903.3	825.8	-11.4
(Number of all deaths)	(1177)	(1222)	(1214)	(+3.1)
STATEWIDE				
Malignant neoplasms	284.8	287.4	247.8	-13.0
Diseases of heart	280.5	244.1	193.1	-31.2
Unintentional injuries	48.9	36.7	40.7	-16.8
Motor vehicle-related	26.3	20.8	24.7	-6.1
Other than motor vehicle	22.6	15.9	16.0	-29.2
Chronic obstructive pulmonary disease	48.9	41.0	34.5	-29.5
Alcoholism	33.6	30.5	24.2	-28.0
ALL CAUSES	918.4	851.5	734.3	-20.1
(Number of all deaths)	(4672)	(4778)	(4766)	(+2.0)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

[3] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-21

MORTALITY RATES[1] AMONG MIDDLE-AGED ADULTS (45-64 years) BY GENDER IN URBAN AND RURAL AREAS,[2] ARIZONA, 1980, 1985, AND 1990

Area/Gender	1980	1985	1990	% Change from 1980
Urban				
Male	1193.1	1062.3	910.5	-23.7
Female	666.0	625.1	520.8	-21.8
Total	913.7	835.0	707.5	-22.6
RURAL				
Male	1281.1	1143.5	1100.0	-14.1
Female	610.5	680.8	569.0	-6.8
Total	932.4	903.3	825.8	-11.4
STATEWIDE				
Male	1215.4	1081.9	953.7	-21.5
Female	651.7	638.5	686.0	+5.3
Total	918.4	851.5	734.3	-20.1

[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-22

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG MIDDLE AGED ADULTS (45-64 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Malignant neoplasms	321.0	261.0	-18.7
	Diseases of heart	310.4	198.9	-35.9
	Chronic obstructive pulmonary disease	59.8	40.1	-32.9
	Unintentional injuries	30.4	35.0	+15.1
	Motor vehicle-related	22.6	20.3	-10.2
	Other than motor vehicle	7.8	14.7	+88.5
	Suicide	24.9	26.3	+5.6
	ALL CAUSES	972.6	735.3	-24.4
	Number of all deaths)	(3,873)	(3,801)	(-1.9)
Hispanic	Malignant neoplasms	197.8	188.1	-4.9
	Diseases of heart	188.9	139.9	-25.9
	Unintentional injuries	58.8	48.2	-18.0
	Motor vehicle-related	42.8	30.6	-28.5
	Other than motor vehicle	16.0	17.6	+10.0
	Diabetes	17.8	30.6	+71.9
	Alcoholism	53.5	20.0	-62.6
	ALL CAUSES	773.4	594.8	-23.1
	(Number of all deaths)	(434)	(506)	(+16.6)
Black	Diseases of heart	474.3	334.8	-29.4
	Malignant neoplasms	345.8	313.9	-9.2
	Unintentional injuries	108.7	62.8	-42.2
	Motor vehicle-related	79.0	48.8	-38.2
	Other than motor vehicle	29.6	14.0	-52.7
	Alcoholism	56.7	48.8	-13.9
	Chronic obstructive pulmonary disease	29.6	41.9	+41.6
	ALL CAUSES	1,442.5	1,060.3	-26.5
	(Number of all deaths)	(146)	(152)	(+4.1)
Native American	Diseases of heart	198.3	222.7	+12.3
	Malignant neoplasms	122.4	174.1	+42.2
	Unintentional injuries	128.3	129.6	+1.0
	Motor vehicle-related	105.0	89.1	-15.1
	Other than motor vehicle	23.3	40.5	+73.8
	Diabetes	81.6	109.3	+34.0
	Alcoholism	163.3	97.2	-40.5
	ALL CAUSES	1,207.1	1,117.4	-7.4
	(Number of all deaths)	(207)	(276)	(+33.3)
Total: All Ethnic Groups[3]	Malignant neoplasms	284.8	247.8	-13.0
	Diseases of heart	280.5	193.1	-31.2
	Unintentional injuries	48.9	40.7	-16.8
	Motor vehicle-related	26.3	24.7	-6.1
	Other than motor vehicle	22.6	16.0	-29.2
	Chonic obstructive pulmonary disease	48.9	34.5	-29.5
	Alcoholism	33.6	24.2	-28.0
	ALL CAUSES	918.9	734.3	-20.1
	(Number of all deaths)	(4,672)	(4,766)	(+2.0)

[1] Leading causes are based on 1990 vital records.

[2] Includes only whites of non-Hispanic origin.

[3] Includes other ethnic groups.

FIGURE 39.

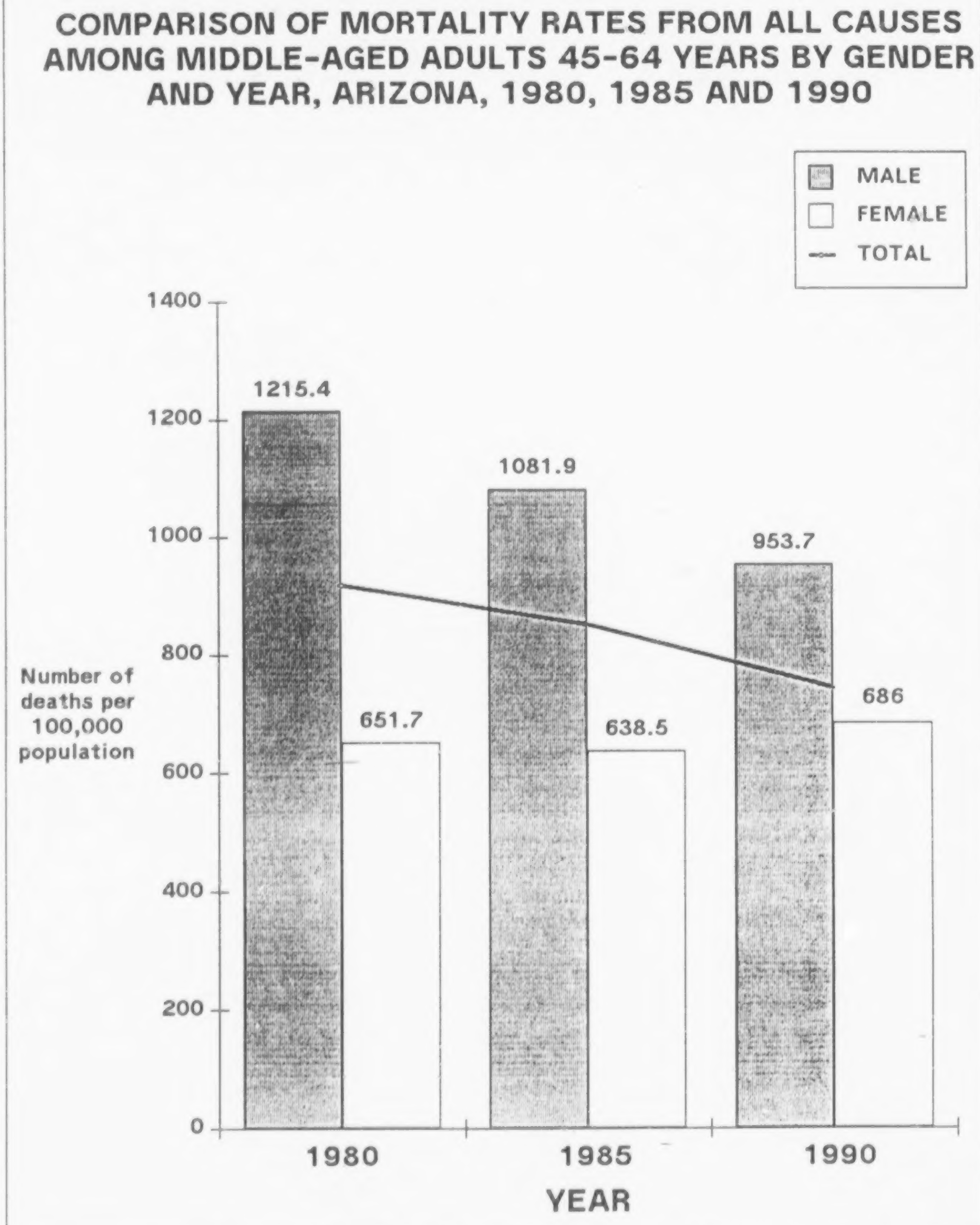

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG MIDDLE-AGED ADULTS 45-64 YEARS BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990
MALE
FEMALE
TOTAL
1400
1200
1000
800
600
400
200
0
Number of deaths per 100,000 population
1215.4
651.7
1081.9
638.5
953.7
686
1980
1985
1990
YEAR

FIGURE 40.

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG MIDDLE-AGED ADULTS 45-64 YEARS IN URBAN AND RURAL AREAS BY YEAR, ARIZONA, 1980, 1985 AND 1990

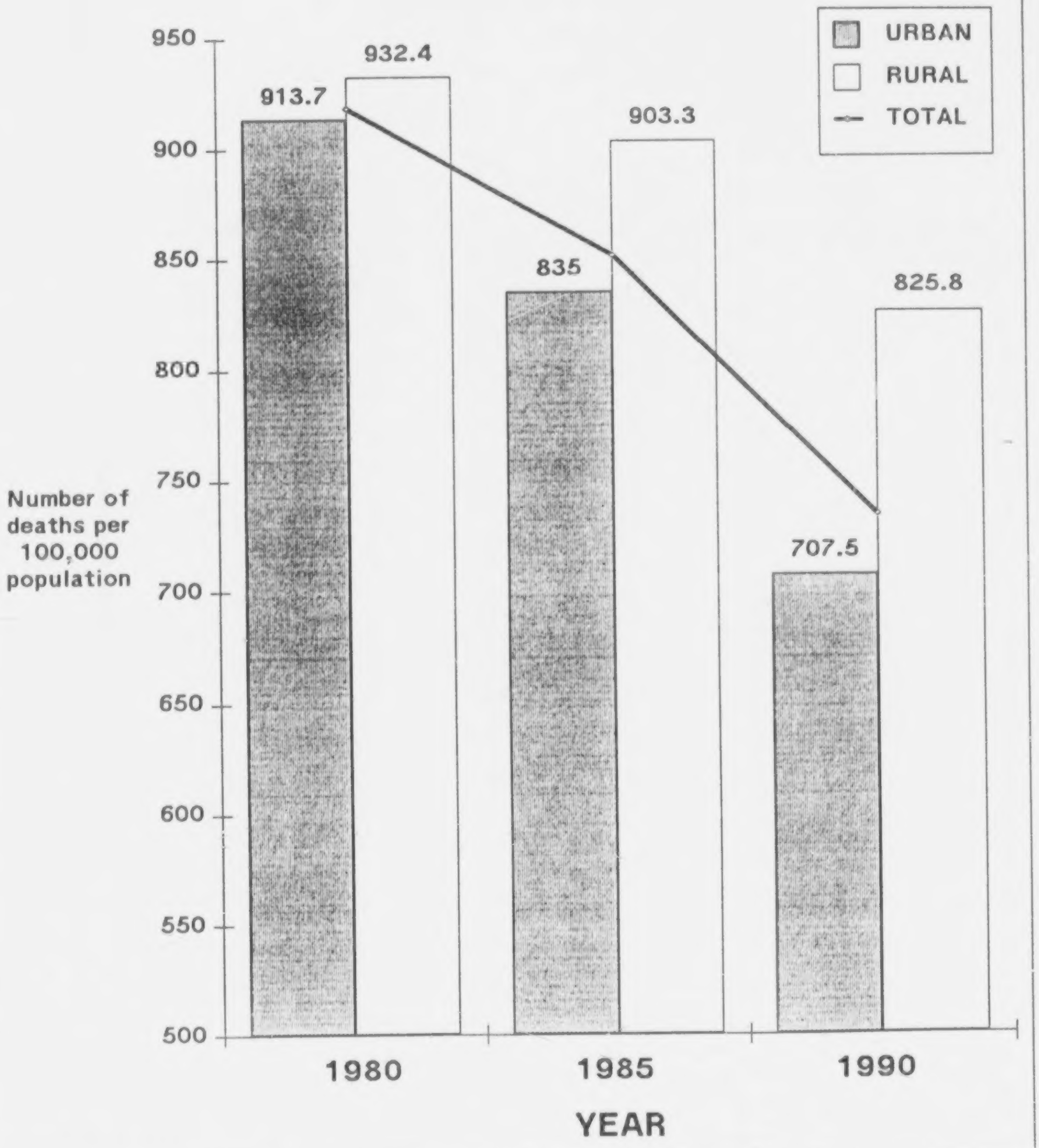
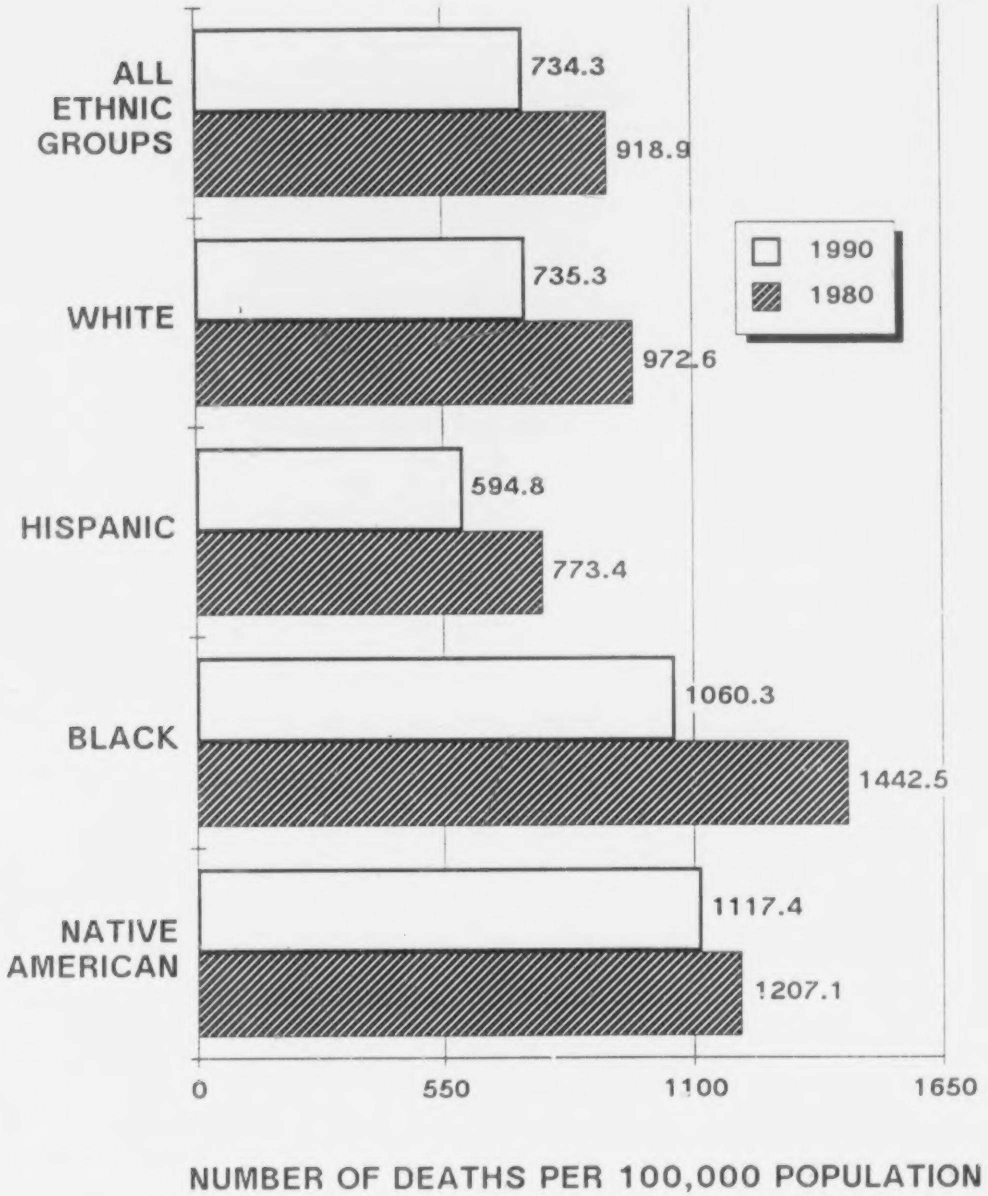


FIGURE 41.

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG MIDDLE-AGED ADULTS 45-64 YEARS BY ETHNIC GROUP AND YEAR,ARIZONA 1980 AND 1990



Elderly Mortality

The elderly (65 years and older) population grew 56 percent from 1980 to 478,774 persons in 1990. Senior adults comprised 13.1 percent of the total population in 1990 compared to 11.3 percent in 1980. Life ended for 20,296 elderly persons in 1990 for a mortality rate of 4,239.2 per 100,000 (Table 3-23), the lowest annual elderly mortality rate of the eleven years from 1980 to 1990. However, most of the decline occurred from 1980 to 1985, with a slowing of the rate of decline thereafter.

Rates of elderly death from heart disease and stroke, two causes that share many risk factors such as hypertension, smoking and hypercholesterolemia, declined by almost the same amount, i.e., 15 percent, from 1980 to 1990. However, the largest portion of the decline in stroke mortality happened from 1980 to 1985, while the decrease in heart disease mortality occurred at a relatively constant annual rate during the 11 years.

Sizeable increases were seen from 1980 to 1990 in the rates of elderly death from cancer and pneumonia/influenza, with the rate of increase for the latter twice as great as the rate of increase in the former. The opposing changes in death rates for heart disease and cancer reduced the relative likelihood to die from heart disease rather than cancer among the elderly. In 1980, heart disease was twice as likely as cancer to claim senior lives; by 1990, the differential was only 49 percent greater for heart disease.

Chronic obstructive pulmonary disease (COPD) mortality increased by 6 percent in death rate from 1980 to 1990 compared to the nearly 28 percent increase in death rate for pneumonia/influenza. The smaller increase for COPD halved its risk of death relative to pneumonia/influenza. In 1980, the elderly were 52 percent more likely to die from COPD than from pneumonia/influenza. The risk of death from COPD for seniors in 1990 was only 26 percent greater than the risk of death from pneumonia/influenza.

Gender Differences. Survival chances did not improve from 1980 to 1990 for elderly females and, in fact, the 1990 elderly female total mortality rate was the highest of the 11-year period (Table 3-23). In sharp contrast, elderly males had the best survival chances of the 11-year period in 1990, with a 9 percent decline in total death rate from 1980 to 1990 (Figure 42). Due to the differing trends by gender, the male to female differential in total mortality fell from 51 percent greater for males in 1980 to 36 percent greater for males in 1990.

Elderly females compared to males had a 45 percent smaller decline in heart disease mortality and a 2.8 times greater increase in the rate of death from cancer from 1980 to 1990. In addition, COPD death rates fell by 26 percent for elderly males, while they increased by 64 percent for elderly females. The increase in the rate of death from pneumonia/influenza from 1980 to 1990 also was larger for elderly females than males. The only advantage elderly females had over elderly males in mortality rates for the five leading causes was that their stroke mortality rate declined 2.2 times more.

Geographic Differences. Total mortality rates declined twice as much for the rural elderly than for the urban elderly (Table 3-24, Figure 43). The greater decline further improved the relative survival chances of the rural elderly to the urban elderly. During the 11-year period, annual total mortality rates always were lower for the rural than for the urban elderly. However, the mortality disadvantage of urban relative to rural elderly went from 1.2 percent higher in 1980 to 4.9 percent higher in 1990.

The size of the decline in heart disease mortality and the size of the increase in cancer mortality from 1980 to 1990 was almost identical for the elderly in both regions. In contrast, the decrease in death rate for stroke was 71 percent greater for the rural than for the urban elderly. Moreover, the increase from 1980 to 1990 in rate of death from pneumonia/influenza was 10.5 times greater for urban than rural elderly. In 1980, pneumonia/influenza was the single leading cause of death for which rural elderly were at higher mortality risk than urban elderly. Those positions were reversed in 1990.

The smaller decline in total mortality rates for urban elderly was primarily due to the fact the death rates, in fact, increased for urban elderly females, the only gender by region group with poorer survival chances in 1990 than in 1980 (Table 3-25). Urban male seniors had the largest decline in total death rate, followed by rural male seniors and rural female seniors. In 1980, the survival chances of females in either region barely differed. By 1990, urban elderly females were 10 percent more likely to die than their peers in rural Arizona. Rural elderly females had the best survival chances in 1990 and rural elderly males had better survival chances than their urban peers.

Ethnic Differences. From 1980 to 1990, total mortality rates declined by 18 percent for Hispanics, by 14 percent for Native Americans, and by 3 percent for white non-Hispanics, while total mortality remained the same for Blacks (Table 3-26, Figure 44). Blacks in 1980 had survival chances that were 24 percent poorer than the survival chances of white non-Hispanics, 23 percent poorer than Hispanics, and 5 percent poorer than Native Americans. By 1990, the inequity between Blacks and each of the other ethnic groups in survival chances was larger. Blacks were 49 percent more likely to die than Hispanics, 27 percent more likely than white non-Hispanics, and 22 percent more likely than Native Americans. Hispanic elderly had the lowest total mortality rate in 1990, 15 percent lower than the total mortality rate of the second lowest group, white non-Hispanics.

Heart disease death rates declined least for Black elderly and most for Hispanic elderly, with white non-Hispanics and Native Americans intermediate. Blacks also were most disadvantaged in terms of cancer mortality, with their increase in death rate for cancer the largest, while Hispanics had the lowest. Compared to white non-Hispanics, the ethnic group with the second highest death rate for both heart disease and cancer in both 1980 and 1990, Blacks became more disadvantaged. The Black excess in heart disease mortality relative to white non-Hispanics increased from a 14 percent elevation in 1980 to a 26 percent elevation in 1990, while the Black excess in cancer mortality risk rose from a 6 percent elevation in 1980 to a 28 percent elevation in 1990.

White non-Hispanics were the only ethnic group for which COPD was one of the five leading causes of death. The rate of death from COPD rose by 7 percent from 1980 to 1990. Diabetes took the place of COPD for each of the ethnic minority groups, ranking fourth for Hispanics and Native Americans and fifth for Blacks. Diabetes death rates declined by 37 percent for Blacks and by 4 percent for Native Americans, while they increased by 11 percent among Hispanics. Hispanics in 1990 became the ethnic minority group with the second highest diabetes death rate after the Native American rate.

Pneumonia/influenza was the third leading cause of death for Native Americans, exceeding each of the other ethnic groups in rate of death from this cause by at least 158 percent in 1980. From 1980 to 1990, pneumonia/influenza death rates increased by 36 percent for white non-Hispanics and by 14 percent for Blacks, while they declined by 22 percent for Hispanics and by 12 percent for Native Americans. The large increase for white non-Hispanics moved them from the lowest group in rate of death from this cause in 1980 to second highest in 1990. Native Americans retained their excessive death rate for pneumonia/influenza compared to each of the other ethnic groups in 1990, but the excess was reduced to 119 percent at minimum.

Mortality Within Age Subgroups of the Elderly

The elderly were divided into three age subgroups: 65-74 years, 75-84 years, and 85 or more years. The two older age groups comprised a larger share of the elderly population in 1990 than in 1980, with percents of 39 and 34 respectively. In 1990, those elderly at least 85 years old were 67 percent female, 82 percent urban, and 88 percent white non-Hispanic, and accounted for 26 percent of elderly deaths. Seniors 65 to 74 years old comprised 34 percent of 1990 elderly deaths and persons aged 75-84 accounted for the remaining 40 percent of 1990 elderly deaths.

Total mortality rates declined for each age subgroup by nearly the same amount

(Table 3-27). The decrease in both heart disease mortality and stroke mortality was roughly equivalent for each age group. In contrast, the increase in cancer mortality rates was confined to the two younger age subgroups, while the increase in COPD mortality rates was limited to the two older subgroups. Pneumonia/influenza death rates increased the most (32 percent) among the youngest elderly, namely those 65-74 years old, did not increase among the elderly in the intermediate age group, and increased by the lesser amount of 12 percent among the oldest elderly.

Age Subgroup Differences Within Gender. Attention focuses on differences in direction of change in total and cause-specific mortality rates among the subgroups for each gender. Few such differences were found (Table 3-27). The oldest elderly males experienced a decline in cancer death rates from 1980 to 1990, while elderly men in the two younger age cohorts had increased cancer death rates. Among elderly females, pneumonia and influenza death rates increased from 1980 to 1990 for both the youngest and oldest age subgroups, while the rate of death from this cause declined for females 75-84 years old.

Age Subgroup Differences Within Region. Two differences in direction of change in either total or cause-specific mortality were seen among both urban and rural age subgroups (Table 3-28). Among urban elderly total mortality rates increased slightly in the oldest age subgroup, while the younger age groups experienced either a decline or stability in total mortality. COPD death rates declined from 1980 to 1990 for the youngest group of urban elderly but increased for both older groups of urban elderly.

Among rural elderly, both cancer and pneumonia/influenza death rates increased from 1980 to 1990 among the youngest age group, while they declined for both older age subgroups. This was distinctly different from the pattern across age groups seen for the urban elderly, where cancer and pneumonia/influenza claimed the lives of each age subgroup of the urban elderly at a higher rate in 1990 than in 1980.

In 1980, the survival chances of both rural males and females in the two oldest age groups were much worse than the survival chances of their urban counterparts, with rural compared to urban total mortality rates of each gender in these two age subgroups at least 72 percent higher. From 1980 to 1990, the decline in total mortality of rural male elderly in the two older age groups was at least 2.7 times greater than the decline for their urban peers (Table 3-29). Rural elderly females in the two older age groups had at least a 53 percent decrease in total mortality rates, while urban elderly females in these age groups had at least a 2 percent increase. These differences in direction and amount of change resulted in a convergence in survival chances from 1980 to 1990 among the rural and urban elderly in each of the three age groups. Rural females aged at least 85 went from a 136 percent mortality disadvantage compared to their urban counterparts in 1980 to a 2 percent mortality advantage in 1990. Rural males in the same age group went from a 81 percent higher mortality risk than their urban peers in 1980 to only a 5 percent higher mortality risk in 1990. Survival chances of the youngest subgroup of elderly were almost identical in the two regions in 1990.

Ethnic Differences for 65-74 Year Olds. The decline in total mortality for Hispanic youngest elderly was 2.2 times greater than for Blacks and Native Americans aged 65 to 74 and 5.9 times greater than for white non-Hispanics (Table 3-30). Hispanics fell from the second highest total mortality rate in 1980 to the lowest mortality rate among the ethnic groups in 1990, displacing white non-Hispanics who held the low position in 1980. Blacks had the highest mortality risk in both years and their disadvantage relative to the next highest group increased from 18 percent in 1980 to 40 percent in 1990.

Rates of death from each of the leading causes decreased for Hispanics by a minimum of 22 percent to a maximum of 55 percent, all substantial declines. Among white non-Hispanics, only death rates for heart disease and stroke fell by at least 20 percent, while rates of death from cancer and pneumonia/influenza increased and the COPD death rate was relatively stable. Blacks experienced at least a 25 percent decline in their death rates for heart disease, stroke and COPD, while death rates for cancer and diabetes showed little change. Blacks had higher death rates for heart disease, cancer and stroke than either white non-Hispanics or Hispanics in both years.

Native Americans were the only ethnic group with unintentional injuries among the five leading causes of youngest elderly death, and rates of death from this cause declined as did death rates from heart disease and diabetes. The rate of death from pneumonia and influenza was 4.3 times higher for Native Americans in 1990 than in 1980. In 1990, Native American younger elderly were 3 times more likely to die from pneumonia and influenza than were white non-Hispanics and Hispanics.

Ethnic Differences for 75 to 84 Year Olds. In this age subgroup of the elderly, Hispanics also had the largest decline in total mortality from 1980 to 1990 (Table 3-31). The Hispanic decline was twice as large as the decline for white non-Hispanics and almost 4 times larger than the decline for Native Americans. Black total mortality did not decline and, in fact, slightly increased. Blacks remained the group with the highest mortality rate, while Hispanics moved from the second highest rate in 1980 to the lowest rate in 1990. The mortality inequality between Blacks and white non-Hispanics increased from 1980 to 1990, going from a 8 percent excess for Blacks in 1980 to a 24 percent excess for Blacks in 1990.

The most dramatic increase among the four leading causes of death common to all ethnic groups was the 119 percent rise in the cancer death rate for Blacks, followed by the 86 percent increase in the stroke death rate for Native Americans. Blacks in 1990 had the highest death rate for three of the four leading causes in common, namely heart disease, cancer and stroke. Native Americans had the highest death rate for pneumonia and influenza, a circumstance that also applied in 1980.

Ethnic Differences for Persons At Least 85 Years Old. As with the two younger elderly subgroups, Hispanics had the largest decline in total mortality among the oldest elderly (Table 3-32). Blacks, in contrast, had a higher mortality rate in 1990 than in 1980, moving them from the group with the best survival chances in 1980 to the group with the second worst survival chances in 1990. White non-Hispanics had the poorest survival chances among the ethnic groups in both years.

Blacks had an increase of at least 36 percent in their death rates for heart disease, cancer and pneumonia/influenza. No leading cause of death increased this much in any other ethnic group. Moreover, every other ethnic group except Blacks had a decrease in at least three of their five leading causes of death.

In 1990, heart disease death rates were highest among white non-Hispanics and lowest among Native Americans. Cancer death rates in 1990 were highest among Blacks and lowest among Native Americans. Stroke death rates in 1990 were highest for Blacks and lowest for Native Americans. Native Americans had the highest death rate for pneumonia/influenza and Hispanics the lowest death rate for this cause in 1990.

COPD was a leading cause of death only for white non-Hispanics and Hispanics, and it increased in rate for the former and declined in rate for the latter. White non-Hispanics were at greater risk to die from COPD in 1990 than were Hispanics.

Diabetes was among the leading causes of death only for Native Americans and infectious and parasitic diseases was unique to Blacks. Blacks had a 69 percent decrease in their rate of death from infectious and parasitic diseases, the only leading cause that declined for this ethnic group. Diabetes claimed Native American lives at a 12 percent higher rate in 1990 than in 1980.

TABLE 3-23

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ELDERLY (65 years and older) BY GENDER ARIZONA, 1980, 1985 AND 1990

Gender/Cause	1980	1985	1990	Percent Change from 1980
MALE				
Diseases of heart	2,188.5	1,937.6	1,759.5	-19.6
Malignant neoplasms	1,181.3	1,237.0	1,277.2	+8.1
Chronic obstructive pulmonary disease	416.8	392.4	308.8	-25.9
Cerebrovascular disease	374.2	346.7	351.8	-6.0
Pneumonia and influenza	202.2	212.2	253.2	+25.2
ALL CAUSES	5,448.8	5,222.4	4,981.7	-8.6
(Number of all deaths)	(7,412)	(8,811)	(10,309)	(+39.1)
FEMALE				
Diseases of heart	1,477.8	1,413.5	1,319.9	-10.7
Malignant neoplasms	662.5	725.2	811.5	+22.5
Cerebrovascular disease	394.0	321.6	339.9	-13.7
Chronic obstructive pulmonary disease	136.6	178.8	223.3	+63.5
Pneumonia and influenza	151.2	146.8	197.2	+30.4
ALL CAUSES	3,600	3,564.0	3,673.9	+2.0
(Number of all deaths)	(6,168)	(7,912)	(9,987)	(+61.9)
TOTAL				
Diseases of heart	1,792.3	1,639.8	1,509.9	-15.8
Malignant neoplasms	892.1	946.2	1,012.8	+13.5
Cerebrovascular disease	385.2	332.5	326.5	-15.2
Chronic obstructive pulmonary disease	263.5	271.0	278.8	+5.8
Pneumonia and influenza	173.7	175.1	221.4	+27.5
ALL CAUSES	4,418.2	4,280.1	4,239.2	-4.1
(Number of all deaths)	(13,580)	(16,723)	(20,296)	(+49.5)

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[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

TABLE 3-24

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ELDERLY (65 years and older) IN URBAN AND RURAL AREAS,[3] ARIZONA, 1980, 1985 AND 1990

Area/Cause	1980	1985	1990	Percent Change from 1980
URBAN				
Diseases of heart	1,825.9	1,652.9	1,529.7	-16.2
Malignant neoplasms	904.5	945.4	1,025.9	+13.4
Cerebrovascular disease	390.0	333.4	338.3	-13.3
Chronic obstructive pulmonary disease	273.5	273.8	287.4	+5.1
Pneumonia and influenza	162.9	184.5	222.6	+36.7
ALL CAUSES	4,430.5	4,290.7	4,283.9	-3.3
(Number of all deaths)	(10,497)	(12,816)	(15,918)	(+51.6)
RURAL				
Diseases of heart	1,679.5	1,580.3	1,441.3	-14.2
Malignant neoplasms	850.4	938.5	967.4	+13.8
Cerebrovascular disease	369.1	325.7	285.5	-22.7
Chronic obstructive pulmonary disease	230.0	259.1	249.1	+8.3
Pneumonia and influenza	210.1	143.0	217.4	+3.5
ALL CAUSES	4,377.0	4,200.3	4,084.3	-6.7
(Number of all deaths	(3,083)	(3,907)	(4,378)	(+42.0)
STATEWIDE				
Diseases of heart	1,792.3	1,639.8	1,509.9	-15.8
Malignant neoplasms	892.1	946.2	1,012.8	+13.5
Cerebrovascular disease	385.2	332.5	326.5	-15.2
Chronic obstructive pulmonary disease	263.5	271.0	278.8	+5.8
Pneumonia and influenza	173.7	175.1	221.4	+27.5
ALL CAUSES	4,418.2	4,280.1	4,239.2	-4.1
(Number of all deaths)	(13,580)	(16,723)	(20,296)	(+49.5)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths.

[3] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-25

MORTALITY RATES[1] AMONG ELDERLY (65 years and older) BY GENDER IN URBAN AND RURAL AREAS,[2] ARIZONA, 1980, 1985 AND 1990

Area/Gender	1980	1985	1990	Percent Change from 1980
URBAN				
Male	5,527.2	5,285.3	5,021.4	-9.2
Female	3,602.4	3,592.5	3,745.5	+4.0
Total	4,430.5	4,290.7	4,283.9	-3.3
RURAL				
Male	5,214.4	5,040.9	4,857.5	-6.8
Female	3,591.3	3,464.8	3,404.5	-5.2
Total	4,377.0	4,200.3	4,084.3	-6.7
STATEWIDE				
Male	5,448.8	5,222.4	4,981.7	-8.6
Female	3,600	3,564.0	3,673.9	+2.1
Total	4,418.2	4,280.1	4,239.2	-4.1

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[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-26

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG ELDERLY (65 years and older) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Diseases of heart	1808.8	1537.5	-15.0
	Malignant neoplasms	908.6	1035.2	+13.9
	Cerebrovascular disease	389.9	331.6	-15.0
	Chronic obstructive pulmonary disease	279.0	299.3	+7.3
	Pneumonia and influenza	161.9	220.0	+35.9
	ALL CAUSES	4386.9	4272.7	-2.6
	(Number of all deaths)	(12027)	(18119)	(+50.7)
Hispanic	Diseases of heart	1687.1	1247.3	-26.1
	Malignant neoplasms	828.4	836.3	+1.0
	Cerebrovascular disease	383.9	260.8	-32.1
	Diabetes	166.7	184.3	+10.6
	Pneumonia and influenza	212.2	164.4	-22.5
	ALL CAUSES	4450.2	3642.7	-18.2
	(Number of all deaths)	(881)	(1285)	(+45.9)
Black	Diseases of heart	2057.1	1941.0	-5.6
	Malignant neoplasms	958.6	1328.1	+38.6
	Cerebrovascular disease	479.3	481.6	+0.5
	Pneumonia and influenza	179.7	204.3	+13.7
	Diabetes	279.6	175.1	-37.4
	ALL CAUSES	5452.4	5443.7	-.02
	(Number of all deaths)	(273)	(373)	(+36.6)
Native American	Diseases of heart	1345.5	1131.4	-15.9
	Malignant neoplasms	532.6	590.3	+10.8
	Pneumonia and influenza	546.6	482.1	-11.8
	Diabetes	420.5	403.4	-4.1
	Cerebrovascular disease	182.2	255.8	+40.4
	ALL CAUSES	5199.7	4476.6	-13.9
	(Number of all deaths)	(371)	(455)	(+22.6)
Total: All Ethnic Groups[3]	Diseases of heart	1792.3	1509.9	-15.8
	Malignant neoplasms	892.1	1012.8	+13.5
	Cerebrovascular disease	385.2	326.5	-15.2
	Chronic obstructive pulmonary disease	263.5	278.8	+5.8
	Pneumonia and influenza	173.7	221.4	+27.5
	ALL CAUSES	4418.2	4239.2	-4.1
	(Number of all deaths)	(13580)	(20296)	(+49.5)

[1] Leading causes are based on 1990 vital records.

[2] Includes only whites of non-Hispanic origin.

[3] Includes other ethnic groups.

TABLE 3-27

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ELDERLY (65-74, 75-84, 85 Years and Older) BY GENDER, ARIZONA, 1980 AND 1990

GENDER/CAUSE	1980			1990			Percent Change from 1980 to 1990:		
	65-74	75-84	85+	65-74	75-84	85+	65-74	75-84	85+
MALE									
Diseases of heart	1414.8	3235.9	8531.1	1052.7	2370.5	6135.2	-25.6	-26.7	-28.1
Malignant neoplasms	905.5	1637.2	3000.7	938.7	1736.2	2534.3	+3.7	+6.1	-15.5
Chronic obstructive pulmonary disease	320.9	611.9	976.9	221.2	518.3	890.2	-31.1	-15.3	-8.9
Cerebrovascular disease	183.0	581.6	2233.1	132.3	472.2	1347.3	-27.7	-18.8	-39.7
Pneumonia and influenza	71.1	333.5	1535.2	89.7	337.1	1555.9	+26.2	+1.1	+1.4
ALL CAUSES	3622.0	7819.5	21127.0	3050.1	6847.7	15951.6	-15.8	-12.4	-24.5
(Number of all deaths)	(3364)	(2837)	(1211)	(4013)	(4307)	(1989)	(+19.3)	(+51.8)	(+64.2)
FEMALE									
Diseases of heart	644.4	2016.3	6724.8	484.6	1578.6	5659.9	-24.8	-21.7	-15.8
Malignant neoplasms	541.9	811.0	1167.4	633.6	974.9	1358.5	+16.9	+20.2	+16.4
Cerebrovascular disease	130.0	582.2	1983.1	109.2	413.1	1532.8	-16.0	-29.1	-22.7
Chronic obstructive pulmonary disease	96.1	181.8	319.9	145.1	304.1	431.7	+51.0	+67.3	35.0
Pneumonia and influenza	30.2	196.1	1039.5	43.5	178.2	1227.8	44.0	-9.1	+18.1
ALL CAUSES	1867.4	4798.6	14225.2	1773.8	4384.0	13121.8	-5.0	-8.6	-7.8
(Number of all deaths)	(2040)	(2349)	(1779)	(2811)	(3863)	(3313)	(+37.8)	(+64.5)	(+86.2)
TOTAL									
Diseases of heart	998.4	2535.4	7292.5	742.3	1908.4	5817.0	-25.7	-24.7	-20.2
Malignant neoplasms	708.9	1162.7	1743.6	772.0	1291.9	1747.2	+8.9	+11.1	+0.2
Cerebrovascular disease	154.4	581.9	2061.6	119.6	437.7	1471.5	-22.5	-24.8	-28.6
Chronic obstructive pulmonary disease	199.4	364.9	526.4	179.6	393.3	583.3	-9.9	+7.8	+10.8
Pneumonia and influenza	49.0	254.6	1195.3	64.5	244.4	1336.3	+31.6	-4.0	+11.8
ALL CAUSES	2670.0	6084.5	16394.3	2352.8	5,410.1	14057.3	-11.9	-11.1	-14.3
(Number of all deaths)	(5404)	(5186)	(2990)	(6824)	(8170)	(5302)	(+26.3)	(+57.5)	(+77.3)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

TABLE 3-28

MORTALITY RATES[1] FOR THE FIVE LEADING CAUSES[2] OF DEATH AMONG ELDERLY (65-74, 75-84, 85 Years and Older) IN URBAN AND RURAL AREAS[3], ARIZONA, 1980 AND 1990

	1980			1990			Percent Change from 1980 to 1990:		
AREA/CAUSE	65-74	75-84	85+	65-74	75-84	85+	65-74	75-84	85+
URBAN									
Diseases of heart	994.4	2305.5	6275.8	727.1	1901.9	5844.3	-26.9	-17.5	-6.9
Malignant neoplasms	719.4	1043.7	1495.4	775.9	1302.5	1744.5	+7.9	+24.8	+16.7
Cerebrovascular disease	146.6	539.8	1725.0	123.5	442.5	1474.9	-15.8	-18.0	-14.5
Chronic obstructive pulmonary disease	212.4	327.1	447.4	187.8	386.6	617.2	-11.6	+18.2	+38.0
Pneumonia and influenza	46.9	214.1	900.7	62.0	236.3	1322.2	+32.2	+10.4	+46.8
ALL CAUSES	2656.9	5455.2	13640.7	2339.5	5371.0	14014.7	-12.0	-1.5	+2.7
(Number of all deaths)	(4077)	(4103)	(2317)	(5171)	(6433)	(4314)	(+26.8)	(+56.8)	(+86.2)
RURAL									
Diseases of heart	1010.9	4261.5	12267.7	791.1	1933.5	5695.8	-21.8	-54.6	-53.6
Malignant neoplasms	676.0	2055.9	2974.0	759.2	1251.6	1759.2	+12.3	-39.1	-40.9
Cerebrovascular disease	178.8	898.2	3856.9	107.2	419.4	1456.4	-40.0	-53.3	-62.2
Chronic obstructive pulmonary disease	158.2	648.7	929.4	153.6	419.4	432.6	-2.9	-35.4	-53.5
Pneumonia and influenza	55.5	558.9	3020.5	72.4	275.3	1398.7	+30.5	-50.7	-53.7
ALL CAUSES	2726.6	10808.4	31273.2	2395.0	5560.4	14246.6	-12.2	-48.6	-54.4
(Number of all deaths)	(1327)	(1083)	(673)	(1653)	(1737)	(988)	(+24.6)	(+60.4)	(+46.8)
STATEWIDE									
Diseases of heart	998.4	2535.4	7292.5	742.3	1908.4	5817.0	-25.7	-24.7	-20.2
Malignant neoplasms	708.9	1162.7	1743.6	772.0	1291.9	1747.2	+8.9	+11.1	+0.2
Cerebrovascular disease	154.4	581.9	2061.6	119.6	437.7	1471.5	-22.5	-24.8	-28.6
Chronic obstructive pulmonary disease	199.4	364.9	526.4	179.6	393.3	583.3	-9.9	+7.8	+10.8
Pneumonia and influenza	49.0	254.6	1195.3	64.5	244.4	1336.3	+31.6	-4.0	+11.8
ALL CAUSES	2670.0	6084.5	16394.3	2352.8	5410.1	14057.3	-11.9	-11.1	-14.3
(Number of all deaths)	(5404)	(5186)	(2990)	(6824)	(8170)	(5302)	(+26.3)	(+57.5)	(+77.3)

[1] Rates are presented per 100,000 population.

[2] The five causes with the greatest number of deaths in 1990.

[3] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-29

MORTALITY RATES[1] AMONG ELDERLY (65-74, 75-84, 85 Years and Older) BY GENDER IN URBAN AND RURAL AREAS[2], ARIZONA, 1980 AND 1990

	1980			1990			Percent Change from 1980 to 1990:		
Area/Gender	65-74	75-84	85+	65-74	75-84	85+	65-74	75-84	85+
Urban									
Male	3664.5	7091.9	18828.4	3048.0	6812.4	15777.3	-16.8	-3.9	-16.2
Female	1844.5	4299.1	12485.5	1772.1	4388.6	13172.7	-3.9	+2.1	+5.5
Total	2656.9	5455.2	13640.7	2339.5	5371.0	14014.7	-12.0	-1.5	+2.7
Rural									
Male	3502.9	12220.7	34025.4	3056.1	6967.2	16640.2	-12.8	-43.0	-51.1
Female	1947.5	9316.6	29416.3	1779.5	4364.6	12882.1	-8.6	-53.2	-56.2
Total	2726.6	10808.4	31273.2	2395.0	5560.4	14246.6	-12.2	-48.6	-54.4
Statewide									
Male	3622.0	7819.5	21127.0	3050.1	6847.7	15951.6	-15.8	-12.4	-24.5
Female	1867.4	4798.6	14225.2	1773.8	4384.0	13121.8	-5.0	-8.6	-7.8
Total	2670.0	6084.5	16394.3	2352.8	5410.1	14057.3	-11.9	-11.1	-14.3

[1] Rates are presented per 100,000 population.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

TABLE 3-30

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG ELDERLY (65-74 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Malignant neoplasms	698.3	797.0	+14.1
	Diseases of heart	975.5	751.2	-23.0
	Chronic obstructive pulmonary disease	209.5	195.3	-6.8
	Cerebrovascular disease	150.0	119.0	-20.7
	Pneumonia and influenza	45.5	61.5	+35.2
	ALL CAUSES	2575.1	2364.4	-8.2
	(Number of all deaths)	(4757)	(6040)	(+27.0)
Hispanic	Diseases of heart	1335.1	600.5	-55.0
	Malignant neoplasms	1026.2	582.9	-43.2
	Diabetes	176.5	136.9	-22.4
	Cerebrovascular disease	253.8	119.2	-53.0
	Pneumonia and influenza	99.3	66.2	-33.3
	ALL CAUSES	3895.0	2017.9	-48.2
	(Number of all deaths)	(353)	(457)	(+29.5)
Black	Diseases of heart	1655.6	1247.3	-24.7
	Malignant neoplasms	1059.6	1031.4	-2.7
	Cerebrovascular disease	331.1	215.9	-34.8
	Diabetes	165.6	167.9	+1.4
	Chronic obstructive pulmonary disease	198.7	96.0	-51.7
	ALL CAUSES	4602.7	3574.0	-22.4
	(Number of all deaths)	(139)	(149)	(+7.2)
Native American	Diseases of heart	877.6	652.2	-25.7
	Malignant neoplasms	382.5	391.3	+2.3
	Diabetes	360.0	309.8	-13.9
	Pneumonia and influenza	45.0	195.7	+268.2
	Unintentional injuries	270.0	179.4	-33.6
	ALL CAUSES	3285.3	2559.9	-22.1
	(Number of all deaths)	(146)	(157)	(+7.5)
Total: All Ethnic Groups[3]	Malignant neoplasms	708.9	772.0	+8.9
	Diseases of heart	998.4	742.3	-25.7
	Chronic obstructive pulmonary disease	199.4	179.6	-9.9
	Cerebrovascular disease	154.4	119.6	-22.5
	Pneumonia and influenza	49.0	64.5	+31.6
	ALL CAUSES	2670.0	2352.8	-11.9
	(Number of all deaths)	(5404)	(6824)	(+26.3)

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[1] Leading causes are based on 1990 vital records.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 3-31

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG ELDERLY (75-84 Years) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Diseases of heart	2543.6	1918.5	-24.6
	Malignant neoplasms	1198.5	1304.6	+8.9
	Cerebrovascular disease	593.3	441.8	-25.5
	Chronic obstructive pulmonary disease	386.4	419.6	+8.6
	Pneumonia and influenza	242.3	244.5	+0.9
	ALL CAUSES	6068.3	5408.9	-10.9
	(Number of all deaths)	(4633)	(7322)	(+58.0)
Hispanic	Diseases of heart	2700.6	1811.8	-32.9
	Malignant neoplasms	1041.7	1211.2	+16.3
	Cerebrovascular disease	540.1	320.3	-40.7
	Diabetes	192.9	260.3	+34.9
	Pneumonia and influenza	308.6	150.2	-51.3
	ALL CAUSES	6423.6	5095.1	-20.7
	(Number of all deaths)	(333)	(509)	(+52.9)
Black	Diseases of heart	2954.9	2335.8	-21.0
	Malignant neoplasms	777.6	1703.2	+119.0
	Cerebrovascular disease	622.1	681.3	+9.5
	Pneumonia and influenza	233.3	292.0	+25.2
	Diabetes	466.6	243.3	-47.9
	ALL CAUSES	6531.9	6715.3	+2.8
	(Number of all deaths)	(84)	(138)	(+64.3)
Native American	Diseases of heart	1670.0	1514.6	-9.3
	Malignant neoplasms	607.3	774.2	+27.5
	Diabetes	506.1	538.5	+6.4
	Pneumonia and influenza	657.9	538.5	-18.2
	Cerebrovascular disease	253.0	471.2	+86.3
	ALL CAUSES	6174.1	5823.0	-5.7
	(Number of all deaths)	(122)	(173)	(+41.8)
Total: All Ethnic Groups[3]	Diseases of heart	2535.4	1908.4	-24.7
	Malignant neoplasms	1162.7	1291.9	+11.1
	Cerebrovascular disease	581.9	437.7	-24.8
	Chronic obstructive pulmonary disease	364.9	393.3	+7.8
	Pneumonia and influenza	254.6	244.4	-4.0
	ALL CAUSES	6084.5	5410.1	-11.1
	(Number of all deaths)	(5186)	(8170)	(+57.5)

[1] Leading causes are based on 1990 vital records.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 3-32

MORTALITY RATES FOR THE FIVE LEADING CAUSES OF DEATH[1] AMONG ELDERLY (85 Years and Older) BY ETHNICITY, ARIZONA, 1980 AND 1990

Ethnicity	Leading Causes of Death	1980	1990	% Change from 1980
White[2]	Diseases of heart	7575.3	6030.3	-20.4
	Malignant neoplasms	1783.2	1769.4	-0.8
	Cerebrovascular disease	2113.6	1516.6	-28.3
	Pneumonia and influenza	1091.1	1339.1	+22.7
	Chronic obstructive pulmonary disease	517.5	607.9	+17.5
	ALL CAUSES	16441.2	14314.5	-12.9
	(Number of all deaths)	(2637)	(4757)	(+80.4)
Hispanic	Diseases of heart	5998.4	4660.9	-22.3
	Malignant neoplasms	1396.9	1591.5	+16.2
	Cerebrovascular disease	2054.2	1250.5	-39.1
	Pneumonia and influenza	1396.9	1061.0	-24.1
	Chronic obstructive pulmonary disease	821.7	568.4	-30.8
	ALL CAUSES	16023.0	12087.9	-24.6
	(Number of all deaths)	(195)	(319)	(+63.6)
Black	Diseases of heart	3816.8	5254.8	+37.7
	Malignant neoplasms	1526.7	2070.1	+35.6
	Cerebrovascular disease	1526.7	1592.4	+4.3
	Pneumonia and influenza	508.9	1114.7	+119.0
	Infections and parasitic diseases	1017.8	318.5	-68.7
	ALL CAUSES	12722.7	13694.3	+7.6
	(Number of all deaths)	(50)	(86)	(+72.0)
Native American	Diseases of heart	3018.9	2830.2	-6.3
	Malignant neoplasms	1132.1	1226.4	+8.3
	Pneumonia and influenza	3018.9	1981.1	-34.4
	Cerebrovascular disease	754.7	660.4	-12.5
	Diabetes	503.1	566.0	+12.5
	ALL CAUSES	12956.0	11792.5	-9.0
	(Number of all deaths)	(103)	(125)	(+21.4)
Total: All Ethnic Groups[3]	Diseases of heart	7292.5	5817.0	-20.2
	Malignant neoplasms	1743.6	1747.2	+0.2
	Cerebrovascular disease	2061.6	1471.5	-28.6
	Pneumonia and influenza	1195.3	1336.3	+11.8
	Chronic obstructive pulmonary disease	526.4	583.3	+10.8
	ALL CAUSES	16394.3	14057.3	-14.3
	(Number of all deaths)	(2990)	(5302)	(+77.3)

[1] Leading causes are based on 1990 vital records.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

FIGURE 42.

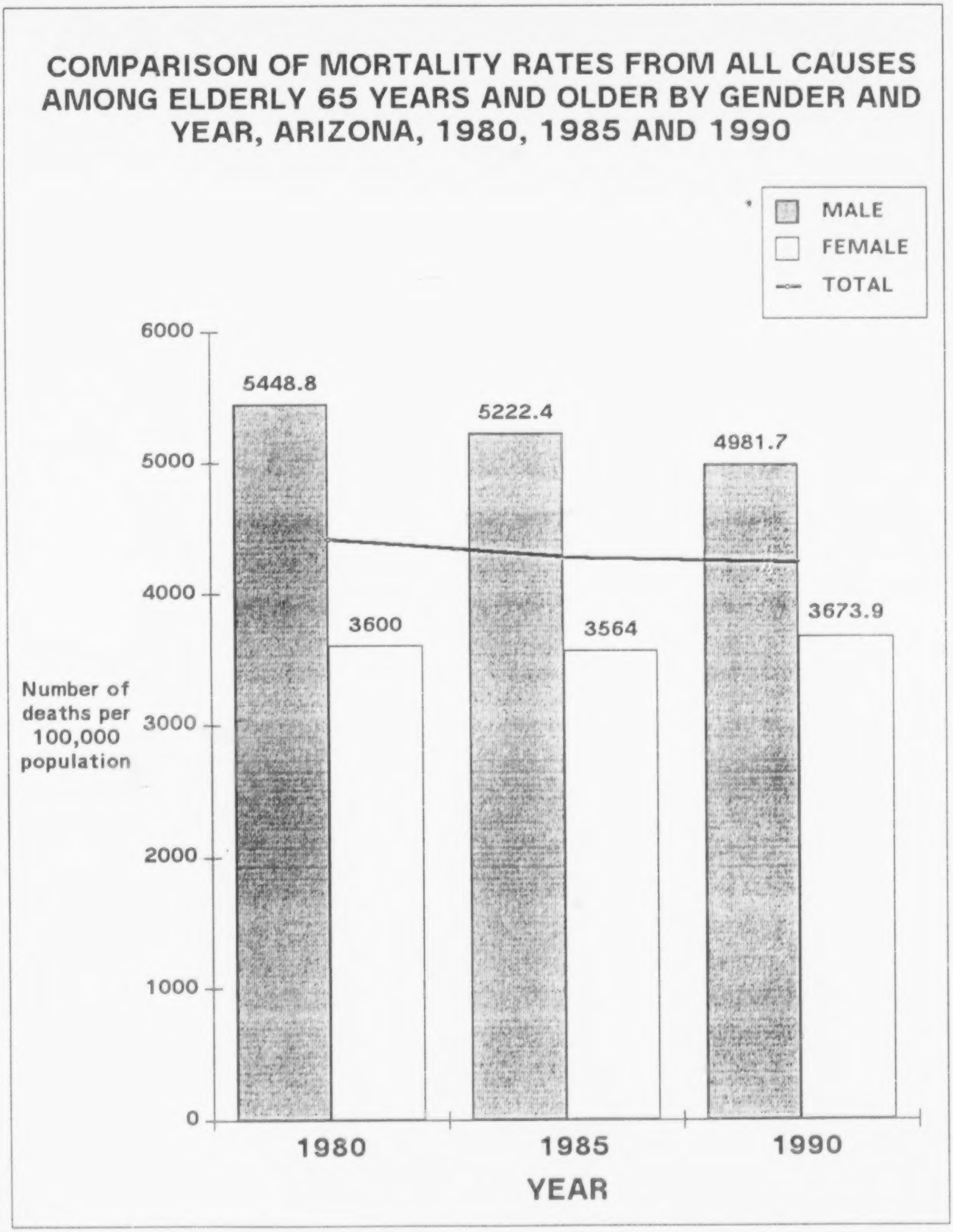

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ELDERLY 65 YEARS AND OLDER BY GENDER AND YEAR, ARIZONA, 1980, 1985 AND 1990
MALE
FEMALE
TOTAL
6000
5000
4000
3000
2000
1000
0
Number of deaths per 100,000 population
5448.8
3600
5222.4
3564
4981.7
3673.9
1980
1985
1990
YEAR

FIGURE 43.

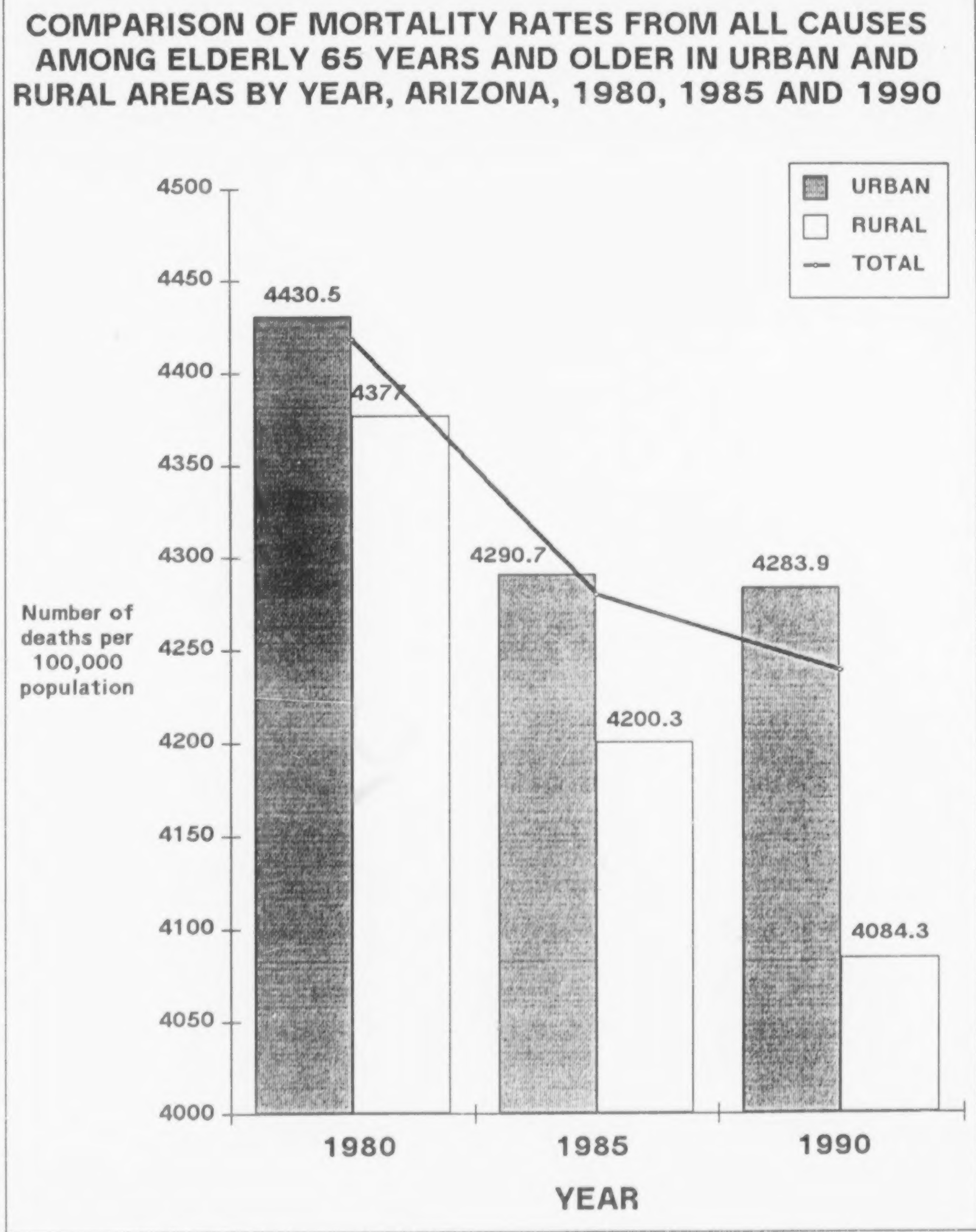
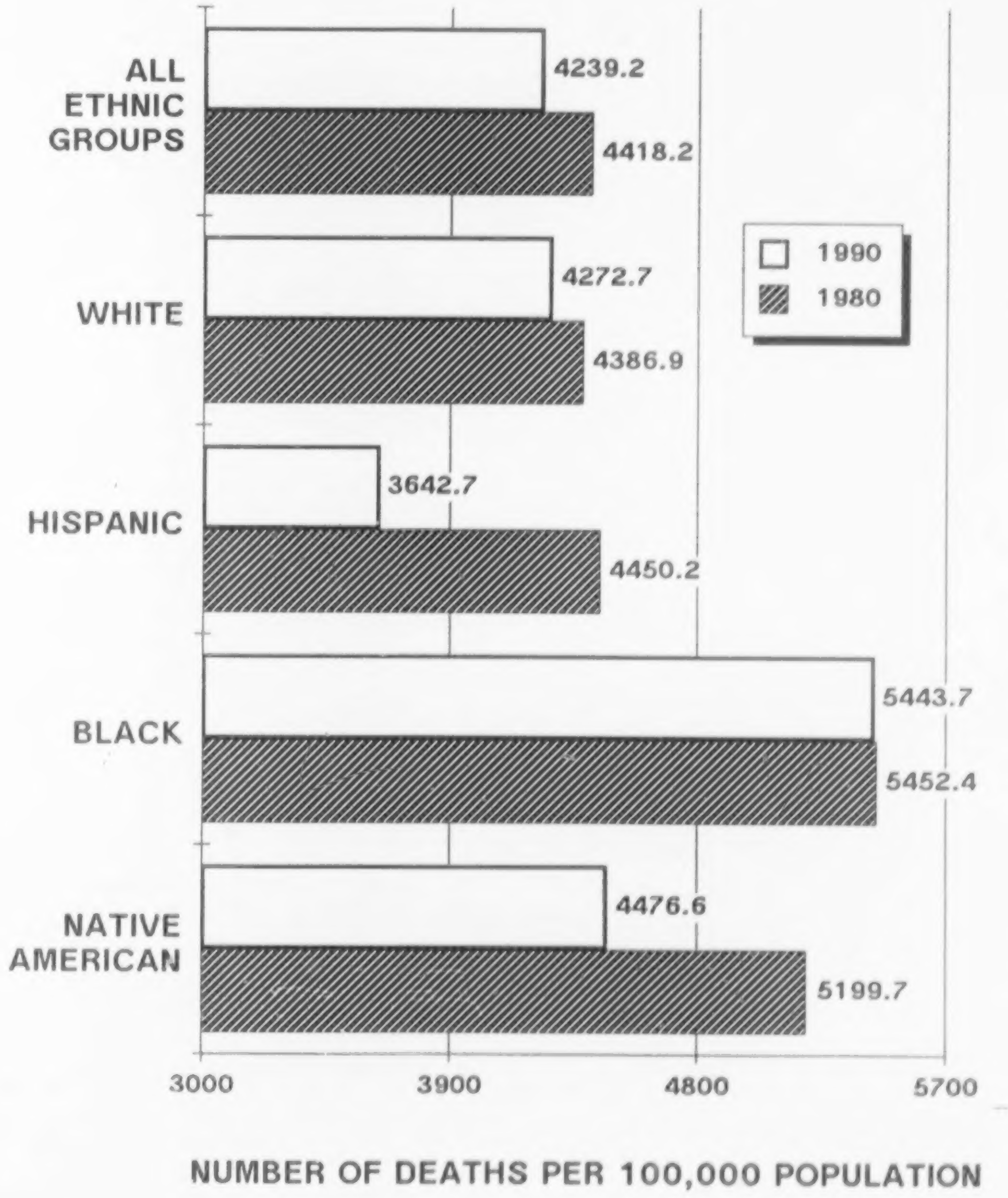

COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ELDERLY 65 YEARS AND OLDER IN URBAN AND RURAL AREAS BY YEAR, ARIZONA, 1980, 1985 AND 1990
▨ URBAN
☐ RURAL
TOTAL
4500
4450
4400
4350
4300
4250
4200
4150
4100
4050
4000
Number of deaths per 100,000 population
4430.5
4377
4290.7
4200.3
4283.9
4084.3
1980
1985
1990
YEAR

FIGURE 44.



COMPARISON OF MORTALITY RATES FROM ALL CAUSES AMONG ELDERLY 65 YEARS AND OLDER BY ETHNIC GROUP AND YEAR,ARIZONA 1980 AND 1990

MORBIDITY

MORBIDITY

Data on morbidity, levels of disease and disability in the population, are obtained about the entire Arizona population only for certain communicable or infectious diseases that must be reported by law. The Division of Disease Prevention Services does surveillance and monitoring of these notifiable diseases and provided the data for this chapter. The Office of Human Immunodeficiency Virus (HIV) infection/Acquired Immunodeficiency Syndrome (AIDS) services within that Division also prepared the section of this chapter dealing with HIV/AIDS.

Non-Sexually Transmitted Diseases

Vaccine preventable diseases. The 311 cases of measles reported in 1990 was the highest incidence of the disease since 1981 (Table 4-1). Only the 1980 incidence of 403 reported cases exceeded the 1990 incidence during the 11-year period. Yuma county with 48 reported cases of measles had a 1990 incidence rate[a] of 44.9, the highest rate among the counties (Table 4-2). Cochise county closely followed with an incidence rate of 43.0. Maricopa county had the largest number of measles cases reported, but its incidence rate as well as the incidence rate for Pima county were below 8.

The 1988 and 1989 epidemics of pertussis (whooping cough) did not recur in 1990, with only 77 cases rather than over 400 cases of the disease reported. The 1990 incidence rate of 2.1 was 80 percent lower than the 1989 incidence rate. Maricopa and Pima counties accounted for 97 percent of the pertussis cases reported (Table 4-2).

The 1990 incidence of mumps was very similar to the incidences in 1988 and 1989, with between 131 to 148 cases reported in each year. Yuma county, with only 3 percent of the state population, accounted for 10 percent of reported mumps cases.

Arizona failed to meet the 1990 objectives for measles, pertussis and mumps, since the 1990 incidence of each disease was greater than expected based on the state's proportional contribution to the national population. Based on our proportional contribution, 8 cases of measles, 15 cases of pertussis, and 30 cases of mumps were expected. Instead, 311, 77 and 145 cases respectively were reported.

The vaccine to prevent chickenpox still is not licensed for routine use. The 1990 incidence rate of 321.2 was the highest of the 11-year period and 9 percent higher than the prior high rate in 1988 of 294.8. Incidence rates of chickenpox were at least 27 percent greater than the state rate in Pinal, Yuma, Santa Cruz, and Cochise counties.

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[a] All incidence rates in this section are number of reported cases per 100,000 population, unless specified otherwise. Table 5-1 in Vital Statistics gives 1990 population values.

The vaccine to prevent Haemophilis influenza type b infection was available for the fourth consecutive year in 1990. Over four years, people probably became more aware of the availability of the vaccine and thus were more likely to use it when indicated. This phenomenon may account for the fact that the number of Haemophilis influenza type b meningitis cases reported in 1990 was the lowest annual number of the 11-year period from 1980 to 1990. The incidence rate of this disease dropped 35 percent from 2.0 in 1989 to 1.3 in 1990. The 1990 geographic distributions of the population and of this disease's incidence conform.

Rubella (German measles) seriously threatens normal development of an infected pregnant woman's fetus and elevates the risk for birth defects. In both 1988 and 1989, no cases of rubella were reported. Moreover, the annual incidence of rubella from 1983 to 1989 was never greater than 8 cases. However, rubella reappeared at an unexpected level in 1990, with 32 cases reported. This incidence exceeded the expected number of 15 cases based on the 1990 national objective. Thus, the objective was not met.

Central nervous system infectious diseases. The incidence of reported cases of aseptic meningitis in 1990 was the highest annual level of the 11-year period (Table 4-1). The 1990 incidence rate of 4.77 was 43 percent greater than the five-year average[b] incidence rate for the last half of the 1980s of 3.34. Moreover, the 1990 incidence rate was greater than the previous high incidence rate of 4.86 in 1986. Ninety percent of the cases of aseptic meningitis were reported in Maricopa and Pima counties (Table 4-2).

Fewer cases of bacterial meningitis were reported in 1990 than in each year from 1986 to 1989. The reporting requirements for bacterial meningitis changed in 1986, so the case reports thereafter differed from the case reports from 1980 to 1985. The average incidence rate for the 1986-1989 period was 4.1. The 1990 incidence rate of 2.2 was 46 percent lower. Maricopa and Pima counties, with 76 percent of the state population, accounted for only 71 percent of the cases of aseptic meningitis reported.

The 1990 incidence of meningococcal meningitis was the lowest annual number of reported cases of the 11-year period. In each of the prior ten years the number of reported cases was at least 12 compared to only 6 in 1990. Five of the 1990 cases were reported in Maricopa county, while the remaining case was in Yuma county.

[b] Averaging over years gives a more reliable rate when annual case numbers are low. The average is the sum of cases divided by the sum of populations for the years involved.

Over the 11-year period from 1980 to 1990, the annual incidence of reported cases of viral encephalitis has averaged 15. The 1990 incidence of 10 was below this average. Nine of 10 cases of viral encephalitis were reported in Maricopa county.

Enteric diseases. The number of reported cases of shigellosis almost doubled from 1989 to 1990, resulting in the highest annual incidence of the 11-year period (Table 4-1). The 1990 incidence rate of 54.4 was 79 percent greater than the five-year average incidence rate from 1985 to 1989 of 30.4. Two small rural counties, Apache and Navajo, with only 4 percent of the 1990 state population, accounted for 36 percent of the reported cases. The 1990 shigellosis incidence rates for Apache and Navajo counties of 646.2 and 403.1 respectively were at least 7.4 times greater than the state rate.

The 1990 incidence of reported cases of campylobacteriosis also was the highest annual level of the 11-year period. Compared to the 1985-89 average incidence rate of 17.6, the 1990 incidence rate of 19.7 was 12 percent higher. Maricopa and Pima counties had 89 percent of the cases of campylobacteriosis reported in 1990.

Similar to shigellosis and campylobacteriosis, reported cases of salmonellosis rose to the highest annual incidence of the 11-year period in 1990. The 1990 incidence rate of 19.3 exceeded the 1985-89 average incidence rate of 14.4 by 34 percent. Among the counties, Apache county had the highest 1990 incidence rate (89.3), with that rate 4.6 times greater than the state rate.

Fewer cases of both giardiasis and amebiasis were reported in 1990 than in each year from 1984 to 1989. The 1990 giardiasis incidence rate of 21.6 represented a 18 percent reduction from the average incidence rate for 1985 to 1989. Amebiasis had a 1990 incidence rate of less than one. Maricopa county, with 83 percent of the reported cases of giardiasis, had a 1990 incidence rate of 30.9, 43 percent higher than the state rate. The 1990 amebiasis incidence rate was twice as high in Pima than in Maricopa county

From 1984 to 1989, the annual incidence of typhoid was no more than 9 reported cases. In 1990, the number of reported cases increased to 19, a level seen previously in 1983. Maricopa county accounted for 84 percent of the typhoid cases reported in 1990.

Coccidioidomycosis or Valley Fever. The 256 cases of coccidioidomycosis (Valley Fever) reported in 1990 was 12 cases less than the cases reported in 1989. The 1990 incidence rate of 7.0 was identical to the average incidence rate for 1987 to 1989. Pima county had a 1990 incidence rate of 11.4, 63 percent greater than the state rate.

Hepatitis. The incidence of reported cases of Hepatitis A finally fell in 1990 after steady yearly increases since 1984. Slightly over 800 fewer cases of Hepatitis A were reported in 1990 than in 1989, a reduction of 40 percent in reported cases. The 1990 incidence rate of Hepatitis A was 54.4 for the state. Incidence rates for Hepatitis A in 1990 were more than double the state rate in Apache, Coconino, Navajo and Santa Cruz counties, with rates of 646.2, 134.6, 204.7, and 195.4 respectively.

The decrease in reported cases of Hepatitis B that began in 1987 continued in 1990, with the 1990 incidence lower than annual incidences from 1985 to 1989. The 1990 incidence rate of 13.3 was 34 percent better than the 1990 objective of a rate no larger than 20. Pinal county had a 1990 incidence rate of 27.5, 38 percent worse than the 1990 objective. It was the only county that failed to meet the 1990 objective.

Nineteen more cases of non-A, non-B Hepatitis were reported in 1990 than in 1989. However, the 1990 count of 72 cases was below the annual counts from 1983 to 1988, which ranged from a low of 81 to a high of 237. Over three-quarters of the non-A, non-B Hepatitis cases in 1990 were reported in Maricopa county.

As expected based on better procedures to diagnose the forms of Hepatitis, the number of unspecified Hepatitis cases fell to its lowest level of the 11-year period in 1990. Pima county disproportionately contributed to the reports of unspecified Hepatitis, accounting for 40 percent of the cases. In contrast, Maricopa county, the other major metropolitan area, accounted for only 10 percent of the cases reported.

Tuberculosis. The 1990 incidence rate of pulmonary tuberculosis (TB) was 6.1, the lowest annual incidence rate of the 11-year period. It was 5 percent lower than the lowest annual incidence rate (6.4) of the past 10 years. Moreover, it was 24 percent better than the 1990 objective of a pulmonary TB rate of no more than 8. The objective was not met in Apache, Gila and Yuma counties, with rates of 13.0, 17.4 and 21.5 respectively. These counties exceeded the objective by at least 62 percent.

Zoonotic diseases. Control of infected animals is critical in the prevention of these diseases since infected animals play a major role in disease transmission to human beings. Rabies has not been reported in a human being from 1983 to 1990. The number of animals reported to be infected with rabies in 1990 was the the third lowest of the 11-year period. Both plague and tularemia had zero incidence in 1990, the second year in the 11-year period with no cases of both. From 1980 to 1990, the average annual number of malaria cases reported was 13. The 1990 case count of 12 conformed to this average.

Other. No case of Reyes Syndrome has been reported in each year from 1988 to 1990. The yearly average number of cases of Toxic Shock Syndrome reported from 1984 to 1989 was 12. The 1990 incidence was below that average.

Mortality from non-sexually transmitted infectious diseases. The year in which a person dies from an infectious disease does not necessarily coincide with the year when that person's disease was reported. In 1990, 90 people died from one of the infectious diseases discussed above (Table 4-3). This closely matched the average of 89 deaths per year seen during the 1980s. The 1990 mortality rate was 2.46 per 100,000.

More deaths were caused by vaccine preventable diseases in 1990 than in any of the prior ten years. The 7 deaths that could have been prevented represented 8 percent of all deaths from selected notifiable diseases. Pertussis, Haemophilus influenzae type b infection, and chicken pox were each responsible for two deaths.

Among the deaths from these notifiable diseases, a form of Hepatitis was responsible for the largest share of 1990 deaths at 30 percent, with Hepatitis B the specific cause for 17 of 27. Unspecified Hepatitis accounted for 30 percent of the Hepatitis deaths. Hepatitis A and non-A, non-B Hepatitis each accounted for one death.

TB was the second largest contributor to 1990 deaths from selected notifiable diseases, with 25 deaths. The third largest contributor to 1990 deaths was Valley Fever, with 21 deaths. The 1990 number of deaths from Valley Fever was the lowest of the 11-year period, while the 1990 number of deaths from TB was similar to earlier years.

Central nervous system diseases were responsible for 7 deaths in 1990, with bacterial meningitis accounting for the majority. Three people died from an enteric disease, while no deaths resulted from a sexually transmitted disease that was not AIDS-related, a zoonotic disease, Reyes Syndrome or Toxic Shock Syndrome in 1990.

Sexually Transmitted Diseases

Reported cases of gonorrhea progressively declined each year after 1985 up to and including 1990 (Table 4-1). The 1990 incidence rate of gonorrhea of 149.0 was the lowest of the 11-year period and 47 percent better than the 1990 objective of 280. Moreover, the 1990 incidence rate of gonorrhea was better than the 1990 objective for every county in Arizona (Table 4-2).

Cases of pelvic inflammatory disease (PID) resulting from an initial gonococcal infection were reported at a slightly higher level in 1990 than in 1989 (Table 4-1). This increased reporting made the 1990 incidence rate of 6.1 per 100,000 females 13 percent greater than the 11-year record low rate of 5.4 per 100,000 females in 1989. Maricopa and Pima counties accounted for 87 percent of the gonococcal PID cases reported.

With 778 cases, penicillin resistant gonorrhea was reported at the highest level of the 1980s in 1989. The incidence of penicillin resistant gonorrhea dramatically dropped in 1990 with only 159 cases reported, an 80 percent reduction in case count. There was almost a fivefold difference between the 1989 incidence rate of 20.9 and the 1990 incidence rate of 4.3. However, the 1990 incidence rate for Pima county of 19.5 differed little from the 1989 incidence rate. In contrast, the 1989 incidence rate of 27.5 for Maricopa county fell to 1.0 in 1990. The latter phenomenon accounted for the dramatic reduction in the incidence rate for the state.

The 1990 incidence rate of gonorrhea was 62 percent greater for males than for females (184.8 and 114.0 respectively) (Table 4-4). The male to female differential in incidence rate for this disease was larger in 1990 than in 1989 (62 and 54 percent respectively). As in 1989, age-specific incidence rates by gender in 1990 indicated that females acquired this disease at earlier ages on average than did males. The highest female incidence rate occurred in mid- to late adolescence (15 to 19 years), while the highest incidence rate for males was among 20 to 24 year olds. During the years from 10 to 14 or preadolescence, the incidence rate of gonorrhea for girls was 2.4 times greater than the incidence rate for boys. The age-specific incidence rates fell below 100 after age 34 for females but not until age 45 for males.

The number of reported primary and secondary syphilis cases rose from 365 in 1989, the annual high of the 1980s, to 631 in 1990, the record high of the 11-year period (Table 4-1). The 1990 incidence rate of 17.2 was 76 percent greater than the 1989 incidence rate and 2.5 times higher than the 1990 objective of 7.0. As in 1989, Maricopa county accounted for 86 percent of the reported cases of primary and secondary syphilis. The incidence rate for this county increased by 75 percent from 1989 to 1990 (rates of 14.6 and 25.5 respectively). Maricopa county's failure to meet the 1990 objective became more pronounced, going from 2.1 times greater to 3.6 times greater.

Total syphilis cases also were reported at the highest annual level of the 11-year period in 1990. Over 300 more cases of total syphilis were reported in 1990 than in 1987, the former highest case count. Three-quarters of the total syphilis cases reported in 1990 were early syphilis (Tables 4-1 and 4-5), the stage when the disease is communicable and hence the focus of control efforts. Early syphilis comprised a smaller share of total syphilis cases in 1989 (67 percent). Sixty-three percent of female cases of early syphilis occurred by age 30 compared to 44 percent of male cases of early syphilis. This skewing of the female distribution of reported cases toward younger ages than the male distribution resembled the gender distributions seen for gonorrhea. The male incidence rate of early syphilis exceeded the female incidence rate by 27 percent, much smaller than the exceedance noted in the case of gonorrhea (Table 4-4).

Males comprised the majority of both gonorrhea and early syphilis cases reported but females the majority (84 percent) of chlamydia cases (Table 4-5). Special case finding programs targeted at females accounted for this gender differential in the reported incidence of chlamydia. Females were targeted because untreated chlamydial infection in women may produce PID and infertility. In addition, infants born to untreated, infected women are at risk for ophthalmic and pulmonary infections.

The number of chlamydia cases reported has steadily risen annually since this disease became reportable in 1987 (Table 4-1). In both 1989 and 1990, chlamydia displaced gonorrhea as the STD with the highest number of reported cases. Over 3,600 more cases of chlamydia were reported in 1990 than in 1989. The 1990 incidence rate of chlamydia of 263.6 was 62 percent higher than the 1989 incidence rate of 162.3. Incidence rates for Apache, Navajo and Coconino counties exceeded the 1990 state incidence rate by at least 90 percent, repeating the pattern seen in 1989.

Females were 3.9 times more likely to be reported to have chlamydia than gonorrhea in 1990 (Table 4-4) as opposed to 2.3 times more likely in 1989. This indicated that chlamydia is comprising a larger share of STD morbidity among females over time. Thus, 76 percent of the women reported in 1990 with one of the three STDs in Table 4-5 had chlamydia. The age group of females with the highest incidence rate of chlamydia in 1989 were 15 to 19 year olds. Middle to late adolescent females were 27 percent more likely to contract this disease than were 20 to 24 year olds.

Chlamydia and gonorrhea became larger problems for young children less than 5 years old in 1990 than in 1989 (Tables 4-4 and 4-5). In 1990, 61 of every 100,000 children below 5 years of age were reported to have chlamydia or gonorrhea compared to 41 of 100,000 in 1989, an increase of 49 percent. The 1990 incidence rate of chlamydia compared to gonorrhea was 8.3 times higher among infants and preschoolers. Young girls had a higher incidence rate of both gonorrhea and chlamydia than did young boys, with girls exceeding boys by 93 percent and 56 percent respectively.

The number of cases of genital herpes reported in 1990 reached an 11-year high at 1,592 (Table 4-1). The 1990 incidence rate of 43.4 was 20 percent higher than the 1989 incidence rate of 36.1. Maricopa and Coconino counties had 1990 incidence rates of genital herpes at least 34 percent greater than the state rate (Table 4-2).

Unlike gonorrhea or chlamydia, genital herpes cannot be cured. However, it is not fatal to infected persons. Thus, the new cases arising in each year can add to the pool of people infected with the disease who can then transmit the disease to others. Genital herpes also is a threat to newborns. Assuming that the 12,453 people reported with genital herpes since 1981 have not died or left the state, the 1990 reported prevalence of this disease would be 339.8 per 100,000 population. In other words, one in every 294 people are now reported to be infected.

Among ethnic groups, Asians/Pacific Islanders had the lowest 1990 incidence rates of early syphilis, late syphilis, total gonorrhea, penicillin resistant gonorrhea, chlamydia, and genital herpes (Table 4-6). Given their consistent ranking, Asians/Pacific Islanders were excluded from the STD-specific comparisons among ethnic groups that follow.

Incidence rates in 1990 for early syphilis ranged from a low of 8.4 for white non-Hispanics to a high of 301.3 for Blacks, almost a 36 times greater rate for Blacks than for white non-Hispanics (Figure 45). The risk of contracting early syphilis in 1990 by Hispanics or Native Americans relative to white non-Hispanics was 2.7 times and 6 times greater respectively, considerably lower than the elevation in risk of Blacks relative to white non-Hispanics. Blacks also had the highest 1990 incidence rate of late syphilis and white non-Hispanics the lowest, with the risk almost 23 times higher for the former than the latter. Hispanics and Native Americans also had elevated 1990 incidence rates of late syphilis relative to white non-Hispanics, with at least a sixfold elevation.

Blacks also were the most disadvantaged group in terms of 1990 incidence rates for total gonorrhea, penicillin resistant gonorrhea, and genital herpes (Table 4-6, Figure 46, 47, 48). Relative to white non-Hispanics, Blacks had a 37.6 times higher rate of gonorrhea, a 35 times greater rate of penicillin resistant gonorrhea, and a 3.6 times higher rate of genital herpes. Hispanics had the second highest incidence rate of penicillin resistant gonorrhea, while Native Americans had the second highest rate of total gonorrhea.

Chlamydia had its highest rate of reported incidence among Native Americans, with their rate 8.5 times higher than the 1990 reported incidence rate of this disease for white non-Hispanics, the group with the lowest incidence rate (Figure 49). Blacks had the second highest 1990 incidence rate of chlamydia, 5.6 times higher than the rate for white non-Hispanics.

Among the six categories of STDs considered in Table 4-6, chlamydia was the most commonly reported STD for white non-Hispanics, followed by gonorrhea, genital herpes, early syphilis, late syphilis, and penicillin resistant gonorrhea. The rank order of the diseases from high to low reported incidence among Blacks was gonorrhea, chlamydia, early syphilis, genital herpes, penicillin resistant gonorrhea, and late syphilis. The corresponding rank order for Hispanics was chlamydia, gonorrhea, early syphilis, genital herpes, late syphilis, and penicillin resistant gonorrhea. Chlamydia was the most frequently reported STD for Native Americans, followed by gonorrhea, early syphilis, genital herpes, late syphilis, and penicillin resistant gonorrhea.

Human Immunodeficiency Virus (HIV) Infection and Acquired Immunodeficiency Syndrome (AIDS)

The HIV and AIDS epidemic continues in Arizona. A total of 1,381 cumulative cases of AIDS had been diagnosed in Arizona by the end of 1990 and reported by August 30, 1991 (Table 4-7). An additional 538 cases of AIDS Related Complex (ARC) and 2,712 HIV-positive individuals had been diagnosed by the end of 1990 and reported by August 30, 1991 (Table 4-7). Overall, 59 percent of Arizonans diagnosed with AIDS from 1981 through 1990 are known to have died (Table 4-8).

A leveling of new AIDS case reports has been seen in recent years. Despite a lag in reporting time and artifacts which may account for some missing cases, 1990 appears to have seen the first real decrease in the number of new AIDS cases in Arizona (Table 4-8). This may be accounted for by a number of factors, including early intervention and treatment efforts which delay the development of AIDS in persons who are HIV-infected. This decrease in diagnosed AIDS cases may be a transient phenomenon. Alternatively, continued improvements in early identification and treatment of HIV-infection may incrementally extend the period of relatively healthy life for HIV-infected persons. With over 3,200 persons known to be living with earlier stages of HIV infection in Arizona and several thousand others estimated to be infected, it is certain that AIDS cases will continue to accumulate for many years, even if all new infections were to suddenly cease.

The largest concentration of diagnoses of AIDS occurs in the 30-39 year old age group (Table 4-7). National studies indicate that the average length of time from infection with HIV to development of AIDS is 10 years or longer. Thus, it is not surprising that the highest concentration of ARC and asymptomatic HIV infection includes individuals in their twenties as well as their thirties.

AIDS diagnoses continue to be overwhelmingly male (Table 4-8). The male to female ratio of AIDS diagnoses in Arizona in 1990 was 15:1, not significantly different from the cumulative ratio of 17:1.

Of the 244 AIDS cases diagnosed in 1990, 199 (82 percent) were white non-Hispanic, 27 (11 percent) Hispanic, and 12 (5 percent) Black (Table 4-9). This represents virtually no change from the proportions among 1989 cases. Using 1990 Census data, the 1990 incidence rates were 7.6, 3.9 and 10.9 for white non-Hispanics, Hispanics and Blacks respectively (Figure 50). The Black to white non-Hispanic ratio in incidence rates has increased from 0.8:1 in 1986 to 1.4:1 in 1990, although the total number of cases among Blacks remains small.

Geographically, the largest concentration of AIDS cases continues to be in Maricopa county, followed by Pima county (Table 4-10). Maricopa county had a significant decrease in cases from 1989 to 1990, going from 249 to 78 respectively. In contrast, Pima county had almost the same number (45) of cases in both years. By 1990, every county had reported at least one case of AIDS, with Cochise, Mohave, Pinal, Yavapai, and Yuma counties each reporting at least 12 cases.

The proportion of risk behaviors attributed to cases of AIDS in 1990 remained similar to previous years (Table 4-11). Of the 244 AIDS cases diagnosed in 1990, 167 (68 percent) were among men who reported sexual contact with other men as their sole risk behavior, very like the 66 percent and 71 percent in this category in 1988 and 1989 respectively. An additional 44 (18 percent) were men who reported both sexual contact with other men and intravenous drug use, up from 8 percent in 1988 and 10 percent in 1989. Another 23 (9 percent) reported only intravenous drug use, and only 7 (3 percent) reported heterosexual contact with an HIV-infected partner or a partner in one of the other risk categories. Transfusion- and hemophilia-associated cases of AIDS continue to decline in the wake of the ability to screen blood supplies beginning in 1985, representing 5 percent of cases in 1990, down from a peak of 10 percent in 1987.

Utilizing estimates and projections of the Centers for Disease Control, and comparing local HIV seroprevalence rates to other regions of the country in this regard, the Arizona Department of Health Services (ADHS) has estimated and projected current and future cases of HIV-related disease in Arizona. Currently, ADHS conservatively estimates that approximately 10,000 Arizonans are living with HIV infection. It is thought that over 3,500 of these persons could benefit from currently approved therapy, but are not obtaining it because they are unaware of their HIV status. By the end of 1993, ADHS expects a cumulative total of more than 3,000 Arizonans to have been diagnosed with AIDS. Given the level of HIV infection already present in the community, and the long time course from infection to AIDS, Arizona will experience the effects of HIV-related disease for many years to come.

TABLE 4-1

NUMBER OF REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY CATEGORY, ARIZONA, 1980 - 1990

DISEASE	NUMBER OF CASES										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Vaccine Preventable											
Measles	403	7	17	1	1	241	252	36	4	145	311
Mumps	46	39	63	97	203	127	209	196	148	131	145
Pertussis	25	13	27	32	27	49	78	41	492	400	77
Rubella	51	25	31	8	5	1	2	5	0	0	32
H Flu Meningitis Type B	51	62	50	63	56	98	117	90	105	75	47
Chickenpox[1]	NA	NA	182	2,584	5,827	5,255	4,980	9,708	10,597	10,009	11,771
Central Nervous System											
Aseptic Meningitis	27	76	33	70	71	89	153	151	85	101	175
Bacterial Meningitis[2]	13	24	15	24	24	30	168	141	144	124	80
Meningococcal Meningitis	19	21	18	20	12	23	16	20	13	16	6
Viral Encephalitis	16	25	16	12	13	17	19	17	15	5	10
Enteric											
Amebiasis	83	26	35	31	50	40	69	41	40	48	34
Campylobacteriosis	78	279	343	539	566	565	587	577	667	647	721
Giardiasis	207	356	435	746	1,432	1,006	965	873	909	848	793
Salmonellosis (except typhoid)	314	369	404	498	353	416	454	479	578	567	708
Shigellosis	754	962	740	928	886	787	912	1,187	1,359	1,032	1,995
Typhoid	7	10	8	19	3	3	9	4	6	8	19
Fungal											
Coccidioidomycosis (Valley Fever)	198	342	251	211	211	191	173	205	284	268	256
Hepatitis											
Hepatitis A	825	503	627	919	777	1,239	1,427	2,044	2,083	2,797	1,994
Hepatitis B	184	191	269	365	486	719	890	857	633	586	488
Non-A Non-B Hepatitis[3]	NA	NA	63	101	138	237	188	134	81	53	72
Unspecified	879	530	267	198	151	171	151	83	57	70	51
Sexually Transmitted											
Genital Herpes	NA	1,078	1,563	1,226	853	998	1,061	1,395	1,344	1,343	1,592
Gonorrhea	10,575	8,354	8,668	8,477	7,676	8,485	8,030	6,552	5,630	5,566	5,461
Gonococcal PID[4]	NA	180	372	346	335	453	464	281	139	102	114
Resistant Gonorrhea[5]	NA	7	12	51	47	73	113	256	748	778	159
Syphilis(P&S)[6]	243	69	178	177	239	311	252	304	175	365	631
Syphilis-Total[7]	533	369	421	501	659	757	696	979	968	833	1,300
Chlamydia[8]	NA	NA	NA	NA	NA	NA	NA	2,948	4,881	6,042	9,661
Tuberculosis											
Pulmonary TB	283	288	245	213	222	219	215	235	225	260	222
Total TB	342	342	300	264	273	271	261	277	267	304	275
Zoonotic											
Human Rabies[9]	0	1	0	0	0	0	0	0	0	0	0
Animal Rabies	78	30	60	35	54	124	102	84	45	28	36
Malaria	19	9	13	8	11	12	15	18	13	9	12
Plague[10]	0	4	4	10	2	0	1	2	1	0	0
Tularemia	1	2	1	2	2	4	1	3	1	0	0
Other											
Reyes Syndrome	5	4	1	1	4	4	3	1	0	0	0
Toxic Shock Syndrome	10	3	3	4	12	13	9	11	16	12	10

[1] Chickenpox was not a notifiable disease prior to 1982.

[2] Effective January 1, 1986, H. flu meningitis and meningococal meningitis were included in the total case count of bacterial meningitis.

[3] Non-A Non-B Hepatitis became a notifiable disease in 1982.

[4] PID is pelvic inflammatory disease.

[5] Includes PPNG, penicillase producing Neisseria gonorrheae, a form of gonorrhea which destroys penicillin and CMRNG, chromosomally mediated resistant Neisseria gonorrhoeae, a form of gonorrhea which is resistant to penicillin.

[6] Primary and secondary syphilis only.

[7] Early, late, congenital and other.

[8] Chlamydia reporting effective January 28, 1987.

[9] 1981 case contracted in New Mexico, expired in Tucson.

[10] No data available in 1980 for plague.

TABLE 4-2

NUMBER OF REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY CATEGORY FOR EACH COUNTY, ARIZONA, 1990

DISEASE	NUMBER OF REPORTED CASES BY COUNTY															
	Arizona	Apache	Cochise	Coconino	Gila	Graham	Greenlee	LaPaz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Vaccine Preventable																
Measles	311	0	42	0	0	0	0	0	157	2	0	53	4	5	0	48
Mumps	145	0	5	1	0	0	2	0	79	2	2	25	7	2	5	15
Pertussis	77	0	0	0	0	0	0	0	62	0	0	13	0	0	2	0
Rubella	32	0	0	0	0	0	0	0	21	11	0	0	0	0	0	0
H Flu Meningitis Type B	47	0	3	2	0	0	0	1	19	2	2	14	1	2	0	1
Chickenpox	11,771	20	575	78	6	22	34	0	7,136	221	6	2,239	473	150	332	479
Central Nervous System																
Aseptic Meningitis	175	2	0	4	1	0	0	0	130	1	1	29	1	0	4	2
Bacterial Meningitis[1]	80	0	3	2	0	0	0	1	41	3	3	16	3	2	3	3
Meningococcal Meningitis	6	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1
Viral Encephalitis	10	0	0	0	0	0	0	0	9	0	0	0	0	0	1	0
Enteric																
Amebiasis	34	1	0	1	0	0	0	0	16	2	0	11	3	0	0	0
Campylobacteriosis	721	3	2	12	7	0	0	0	488	2	30	152	12	1	7	5
Giardiasis	793	3	4	8	1	1	0	0	656	40	5	45	13	2	9	6
Salmonellosis (except typhoid)	708	55	6	17	8	1	1	0	402	5	32	96	52	4	11	18
Shigellosis	1,995	398	14	48	12	0	1	3	794	6	313	278	91	15	5	17
Typhoid	19	0	0	0	0	0	0	0	16	0	0	0	0	2	1	0
Fungal																
Coccidioidomycosis (Valley Fever)	256	0	0	1	0	0	0	2	164	2	1	76	9	0	1	0
Hepatitis																
Hepatitis A	1,994	398	29	130	2	14	3	1	863	15	159	165	100	58	20	37
Hepatitis B	448	4	5	7	2	4	0	1	343	13	5	43	32	4	4	21
Non-A Non-B Hepatitis	72	0	1	0	1	0	0	0	55	1	0	5	8	0	1	0
Unspecified	51	9	4	0	0	1	0	0	5	0	1	22	6	2	1	0
Sexually Transmitted																
Genital Herpes	1,592	12	16	58	3	1	1	0	1,235	7	9	196	15	0	14	25
Gonorrhea	5,461	162	69	112	8	7	2	8	3,886	12	124	817	144	6	15	88
Gonococcal PID[2]	114	6	0	3	0	0	0	0	76	0	3	23	2	0	0	1
Resistant Gonorrhea[3]	159	0	0	3	0	1	0	0	21	0	2	130	1	1	0	0
Syphilis(P&S)[4]	631	2	3	2	0	0	0	0	542	8	4	56	6	0	0	8
Syphilis-Total[5]	1,300	5	10	9	2	4	0	3	1,044	9	24	127	25	5	1	32
Chlamydia	9,661	465	191	484	69	18	6	34	5,367	70	534	1,839	248	19	109	210
Tuberculosis																
Pulmonary TB	222	8	5	4	7	0	0	1	116	4	8	29	8	2	6	23
Total TB	275	16	4	7	8	-	-	1	144	4	10	34	9	3	8	25
Zoonotic																
Human Rabies	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Animal Rabies	36	0	7	0	0	0	0	0	2	2	0	20	3	2	0	0
Malaria	12	0	1	1	0	0	0	0	4	0	0	5	1	0	0	0
Plague	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tularemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other																
Reyes Syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toxic Shock Syndrome	10	-	-	-	-	-	-	-	7	-	-	2	1	-	-	-

[1] Effective January 1, 1986, H. flu meningitis and meningococal meningitis were included in the total case count of bacterial meningitis.

[2] PID is pelvic inflammatory disease.

[3] Includes PPNG, penicillase producing Neisseria gonorrheae, a form of gonorrhea which destroys penicillin and CMRNG, chromosomally mediated resistant Neisseria gonorrhoeae, a form of gonorrhea which is resistant to penicillin.

[4] Primary and secondary syphilis only.

[5] Early, late, congenital and other.

TABLE 4-3

NUMBER OF DEATHS FROM SELECTED NOTIFIABLE DISEASES BY CATEGORY AND YEAR, ARIZONA, 1980 - 1990

		NUMBER OF DEATHS										
ICD Code[1]	Disease	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	Vaccine Preventable											
055	Measles	0	0	0	0	0	0	0	0	0	0	1
072	Mumps	0	0	0	0	0	0	0	0	0	0	0
033	Pertussis	0	0	0	0	0	0	0	0	1	0	2
056	Rubella	0	0	1	0	0	0	0	0	0	1	0
041.5	H Flu Meningitis Type B	0	0	2	1	1	0	2	0	1	2	2
052	Chickenpox	2	1	0	3	1	0	2	0	3	2	2
	Central Nervous System											
047.9	Aseptic Meningitis	0	0	0	3	0	1	0	0	0	3	2
320.9	Bacterial Meningitis	6	7	4	6	6	4	6	12	4	3	5
036.0	Meningococcal Meningitis	1	3	1	0	1	1	1	1	0	2	0
049.9	Viral Encephalitis	3	0	2	2	2	0	6	2	2	2	0
	Enteric											
006	Amebiasis	0	0	2	0	0	0	0	0	1	1	0
007.1	Giardiasis	0	0	0	0	0	0	0	0	0	0	0
003	Salmonellosis (except typhoid)	0	2	0	1	3	3	1	2	0	0	2
004	Shigellosis	0	0	0	1	0	0	0	0	0	0	1
002	Typhoid	0	0	0	0	0	0	0	0	0	0	0
	Fungal											
114	Coccidioidomycosis (Valley Fever)	25	28	28	26	25	37	25	28	22	25	21
	Hepatitis											
070.0-070.1	Hepatitis A	3	1	2	1	6	4	2	9	0	1	1
070.2-070.3	Hepatitis B	1	6	7	3	11	5	11	9	6	9	17
070.4-070.5	Non-A Non-B Hepatitis	0	0	0	0	0	0	0	0	0	0	1
070.6-070.9	Unspecified	5	5	6	6	5	4	6	7	2	10	8
	Sexually Transmitted											
054.1	Genital Herpes	0	0	0	0	0	0	0	0	0	0	0
098.0-098.3	Gonorrhea	0	0	0	0	0	0	0	0	0	0	0
614.9	Gonococcal PID	0	0	1	0	0	0	0	0	1	0	0
090-097	Syphilis (total)	0	1	0	0	0	0	0	0	0	0	0
	Tuberculosis											
010-011	Pulmonary TB	36	35	27	18	29	24	27	17	18	20	16
010-018	Total TB	41	39	31	29	31	27	31	23	25	21	25
	Zoonotic											
071	Human Rabies	0	0	0	0	0	0	0	0	0	0	0
084	Malaria	0	0	0	0	0	0	0	0	0	0	0
020	Plague	0	0	0	2	1	0	0	1	0	0	0
021	Tularemia	0	0	0	0	0	0	0	0	0	0	0
	Other											
331.8	Reyes Syndrome	2	3	0	5	2	2	0	0	2	2	0
995.0	Toxic Shock Syndrome	0	0	0	0	0	0	0	0	0	0	0

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[1] *International Classification of Diseases*, Adapted-Ninth Revision; Geneva: World Health Organization, 1977.

TABLE 4-4

RATES[1] OF GONORRHEA, CHLAMYDIA AND EARLY SYPHILIS BY AGE AND GENDER, ARIZONA, 1990

Age Group	GONORRHEA			CHLAMYDIA			EARLY SYPHILIS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	4.5	8.7	6.5	42.7	66.7	54.2	0	0	0
5-9	0	3.1	1.5	2.2	10.0	6.0	0	0	0
10-14	12.8	31.2	21.9	4.8	84.4	44.1	0.8	2.5	1.6
15-19	544.4	591.2	565.1	251.3	2391.2	1301.7	22.2	59.7	40.5
20-24	662.1	450.8	555.6	360.7	1885.0	1118.9	64.7	69.4	67.2
25-29	427.2	245.0	336.7	174.7	838.1	504.4	70.4	64.4	67.4
30-34	264.2	141.4	203.5	77.5	357.4	215.8	61.9	43.8	52.9
35-39	206.7	66.9	137.2	50.3	200.7	124.5	45.6	29.0	37.4
40-44	110.3	26.2	69.0	32.5	98.4	64.9	31.0	24.6	27.8
45-54	86.9	9.0	47.6	18.9	38.8	28.9	34.3	7.3	20.7
55-64	33.3	1.3	16.7	5.0	16.6	10.9	14.2	0.7	7.2
65-Over	8.9	0.7	4.2	0.5	5.4	3.3	5.0	0	2.1
Total	184.8	114.0	149.0	82.1	440.7	263.6	29.9	23.5	26.7

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[1] Number of cases per 100,000 population.

TABLE 4-5

FREQUENCY OF REPORTED CASES OF GONORRHEA, CHLAMYDIA AND EARLY SYPHILIS BY AGE AND GENDER, ARIZONA, 1990

Age Group	GONORRHEA Male	GONORRHEA Female	GONORRHEA Total	CHLAMYDIA Male	CHLAMYDIA Female	CHLAMYDIA Total	EARLY SYPHILIS Male	EARLY SYPHILIS Female	EARLY SYPHILIS Total
0-4	6	11	17	65	88	153	0	0	0
5-9	-	4	4	3	13	16	0	0	0
10-14	16	38	54	6	103	109	1	3	4
15-19	636	676	1312	295	2728	3023	26	68	94
20-24	873	606	1479	542	2774	3316	96	101	197
25-29	694	392	1086	285	1344	1629	114	103	217
30-34	457	239	696	134	603	737	108	74	182
35-39	308	97	405	75	292	367	68	42	110
40-44	139	32	171	41	120	161	39	30	69
45-54	152	16	168	33	69	102	60	13	73
55-64	47	2	49	7	25	32	20	1	21
65-Over	18	2	20	1	15	16	10	0	10
Total	3,346	2,115	5,461	1,487	8,174	9,661	542	435	977

TABLE 4-6

FREQUENCY OF REPORTED CASES, PERCENT DISTRIBUTION AND RATES[1] OF EARLY AND LATE SYPHILIS, GONORRHEA, CHLAMYDIA AND HERPES BY ETHNICITY, ARIZONA, 1990

RACE/ETHNIC GROUP	SYPHILIS						GONORRHEA						CHLAMYDIA			HERPES		
	EARLY			LATE			RESISTANT			TOTAL								
	# of Cases	%	Rate	# of Cases	%	Rate	# of Cases	%	Rate	# of Cases	%	Rate	# of Cases	%	Rate	# of Cases	%	Rate
White[2]	218	22%	8.4	56	20%	2.1	38	24%	1.5	1202	22%	46.1	2958	31%	113.4	938	59%	36.0
Black	333	34%	301.3	53	18%	48.0	58	37%	52.5	1917	35%	1734.5	698	7%	631.5	144	9%	130.3
Hispanic	347	36%	50.4	118	41%	17.1	39	25%	5.7	1222	22%	177.5	1662	17%	241.5	197	12%	28.6
Asian or Pacific Islander	1	0%	1.8	0	0%	-	1	1%	1.8	7	0%	12.7	26	0%	47.1	1	0%	1.8
Native American	46	5%	22.6	26	9%	12.8	2	1%	1.0	510	9%	250.6	1966	20%	966.0	40	3%	19.7
Not Specified	32	3%	NA	37	13%	NA	21	13%	NA	603	11%	NA	2351	24%	NA	272	17%	NA
Total	977	100%	26.7	290	100%	7.9	159	100%	4.3	5461	100%	149.0	9661	100%	263.6	1592	100%	43.4

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[1] Number of cases per 100,000 population in each ethnic group.

[2] Not of Hispanic origin.

TABLE 4-7[1]

FREQUENCY DISTRIBUTION OF HIV INFECTION BY SUBCATEGORIES AND AGE AT DIAGNOSIS, ARIZONA, 1981-1990

Age Group (Years)	AIDS	ARC	HIV Ab+	Total
Under 5	6	1	9	16
5 - 12	4	4	5	13
13 - 19	7	4	37	48
20 - 29	332	179	943	1,454
30 - 39	600	207	892	1,699
40 - 49	297	106	367	770
>49	135	37	125	297
Unknown	0	0	334	334
Total	1,381	538	2,712	4,631

TABLE 4-8

GENDER DISTRIBUTION OF REPORTED AIDS CASES BY YEAR OF DIAGNOSIS AND ANNUAL CASE FATALITY RATES, ARIZONA, 1981-1990

	1981-83	1984	1985	1986	1987	1988	1989	1990	Total 1981-1990
# Male Cases	14	24	86	149	240	259	304	229	1,305
# Female Cases	1	4	2	4	17	19	14	15	76
# Total Cases	15	28	88	153	257	278	318	244	1,381
# Known Deaths	12	26	73	116	171	171	154	86	809
% Mortality	80	93	83	76	67	62	48	35	59

TABLE 4-9

DISTRIBUTION OF REPORTED AIDS CASES BY YEAR OF DIAGNOSIS AND ETHNIC GROUP FOR CUMULATIVE TOTAL, ARIZONA, 1981-1990 AND RATES FOR 1990

Ethnicity	1981-83	1984	1985	1986	1987	1988	1989	1990	Total 1981-90	1990 Rate[2]
White	12	24	79	134	215	238	257	199	1,158	7.6
Black	0	1	4	4	10	8	19	12	58	10.9
Hispanic	2	1	4	15	25	27	38	27	139	3.9
Native American	0	1	0	0	3	4	2	1	11	0.5
Asian	1	1	0	0	1	0	1	2	6	3.6
Unknown	0	0	1	0	3	1	1	3	9	-
Total:	15	28	88	153	257	278	318	244	1,381	6.7

[1] All data as of 8/30/91.

[2] Number of reported cases per 100,000 population in specified ethnic group.

TABLE 4-10[1]

DISTRIBUTION OF REPORTED AIDS CASES BY YEAR OF DIAGNOSIS AND COUNTY, ARIZONA, 1981-1990

County	1981-83	1984	1985	1986	1987	1988	1989	1990	1981-1990
Apache	0	0	0	0	2	2	1	0	5
Cochise	1	0	1	0	3	3	2	2	12
Coconino	0	0	0	1	0	4	3	1	9
Gila	0	1	0	0	1	0	2	0	4
Graham	0	0	0	0	0	0	1	3	4
Greenlee	0	0	0	0	0	0	0	1	1
La Paz	0	0	0	0	1	1	0	1	3
Maricopa	10	21	62	115	194	197	249	78	1,026
Mohave	0	0	0	1	2	4	3	3	13
Navajo	0	0	0	0	1	1	1	1	4
Pima	3	4	24	30	47	50	45	46	249
Pinal	1	1	1	5	2	1	1	1	13
Santa Cruz	0	0	0	0	0	1	2	0	3
Yavapai	0	1	0	1	2	4	3	3	14
Yuma	0	0	0	0	1	9	5	4	19
Unknown	0	0	0	0	1	1	0	0	2
Total	15	28	88	153	257	278	318	244	1,381

TABLE 4-11

DISTRIBUTION OF REPORTED AIDS CASES BY YEAR OF DIAGNOSIS AND TRANSMISSION CATEGORY, ARIZONA, 1981-1990

Transmission	1981-83	1984	1985	1986	1987	1988	1989	1990	Total, 1981-1990
Gay/Bisexual Male	10	19	67	108	172	184	225	167	952
IV Drug User	1	2	5	9	26	26	21	23	113
Gay/IV Drug User	3	3	8	19	21	32	44	19	149
Adult Hemophiliac	0	1	2	4	6	6	0	1	20
Heterosexual Contact	0	0	1	2	7	9	7	7	33
Adult Transfusion	1	2	2	7	16	9	7	8	52
Adult Undetermined	0	1	3	3	6	12	10	17	52
Pediatric Hemophiliac	0	0	0	0	3	0	0	0	3
Pediatric Transfusion	0	0	0	0	0	0	3	2	5
Mother with HIV-Risk	0	0	0	1	0	0	1	0	2
Total	15	28	88	153	257	278	318	244	1,381

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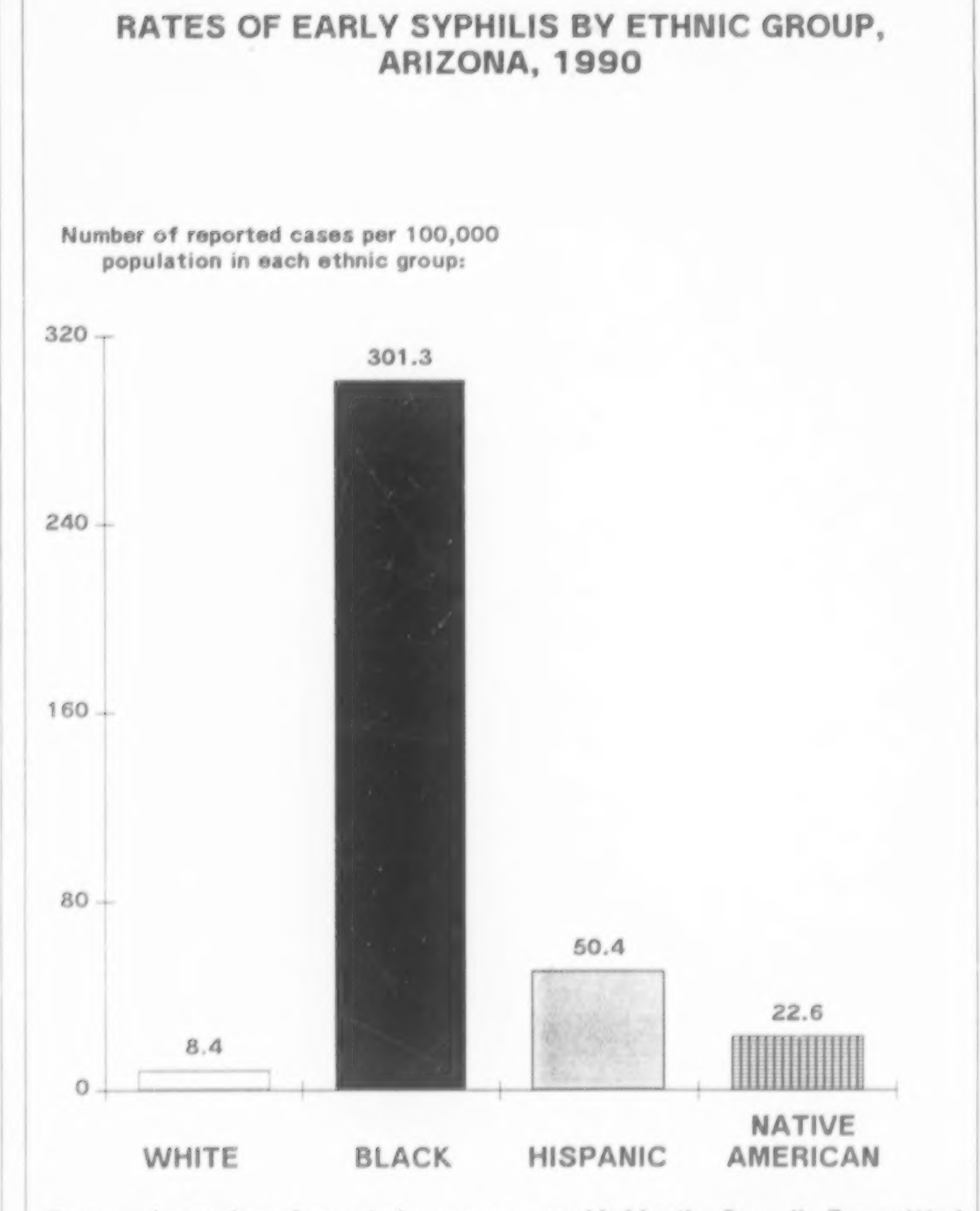
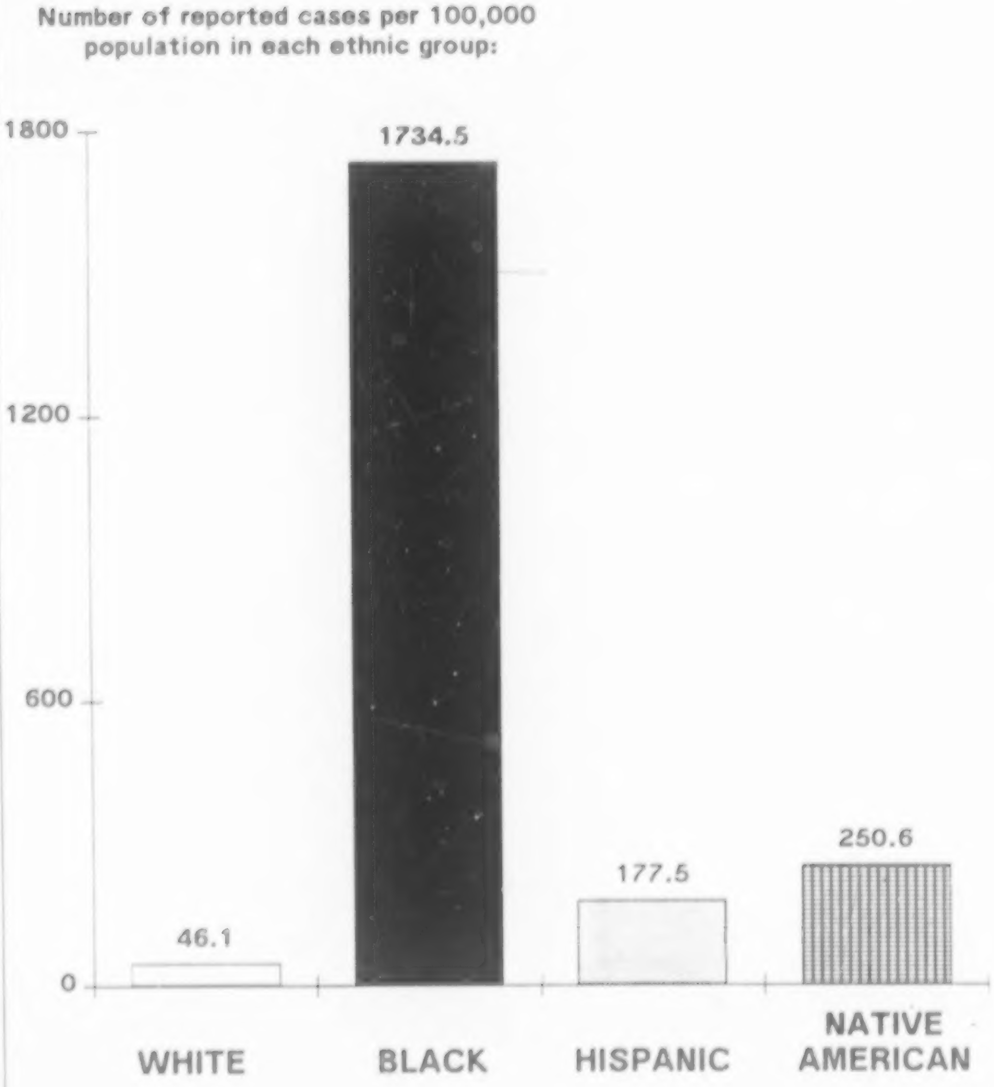
[1] All data as of 8/30/91.

FIGURE 45.



Source: the number of reported cases was provided by the Sexually Transmitted Disease Section in the Division of Disease Prevention, ADHS.

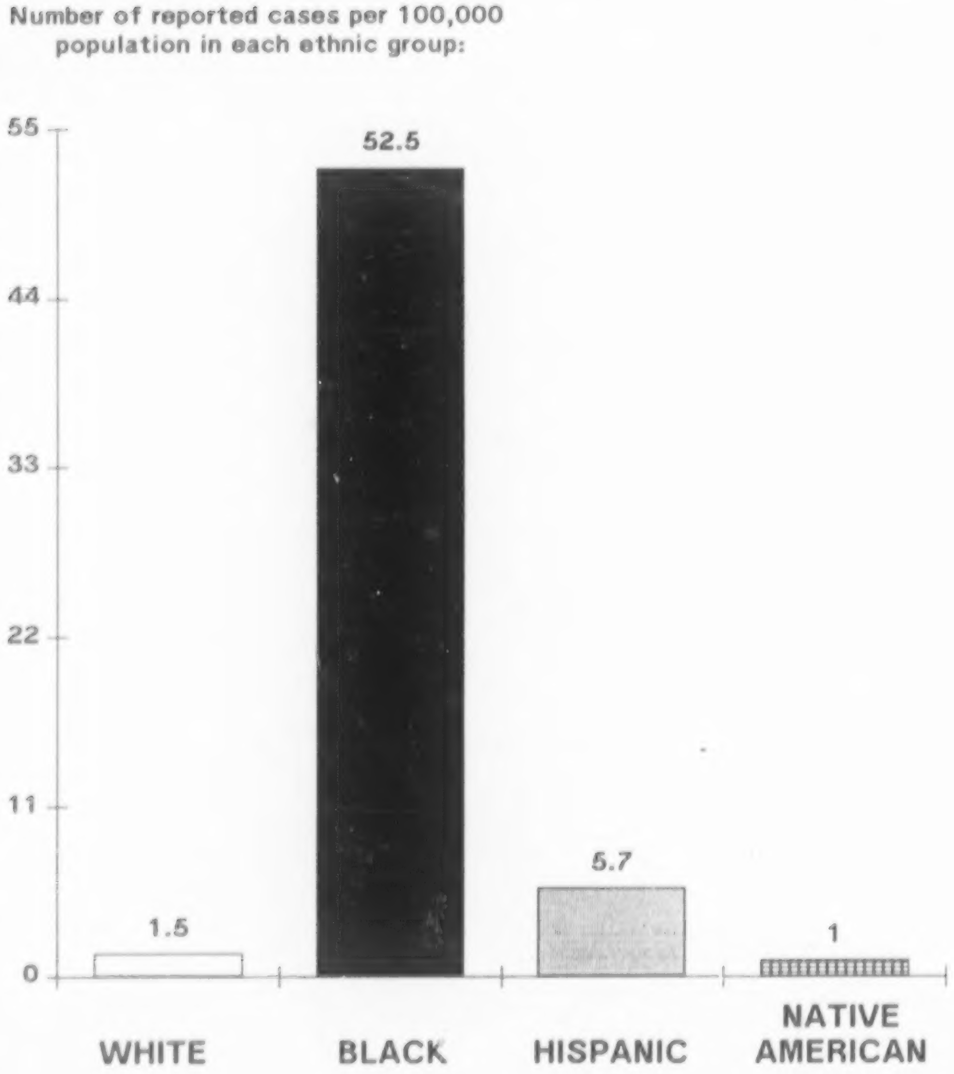
FIGURE 46.



RATES OF GONORRHEA BY ETHNIC GROUP, ARIZONA, 1990

Source: the number of reported cases was provided by the Sexually Transmitted Disease Section in the Division of Disease Prevention, ADHS.

FIGURE 47.

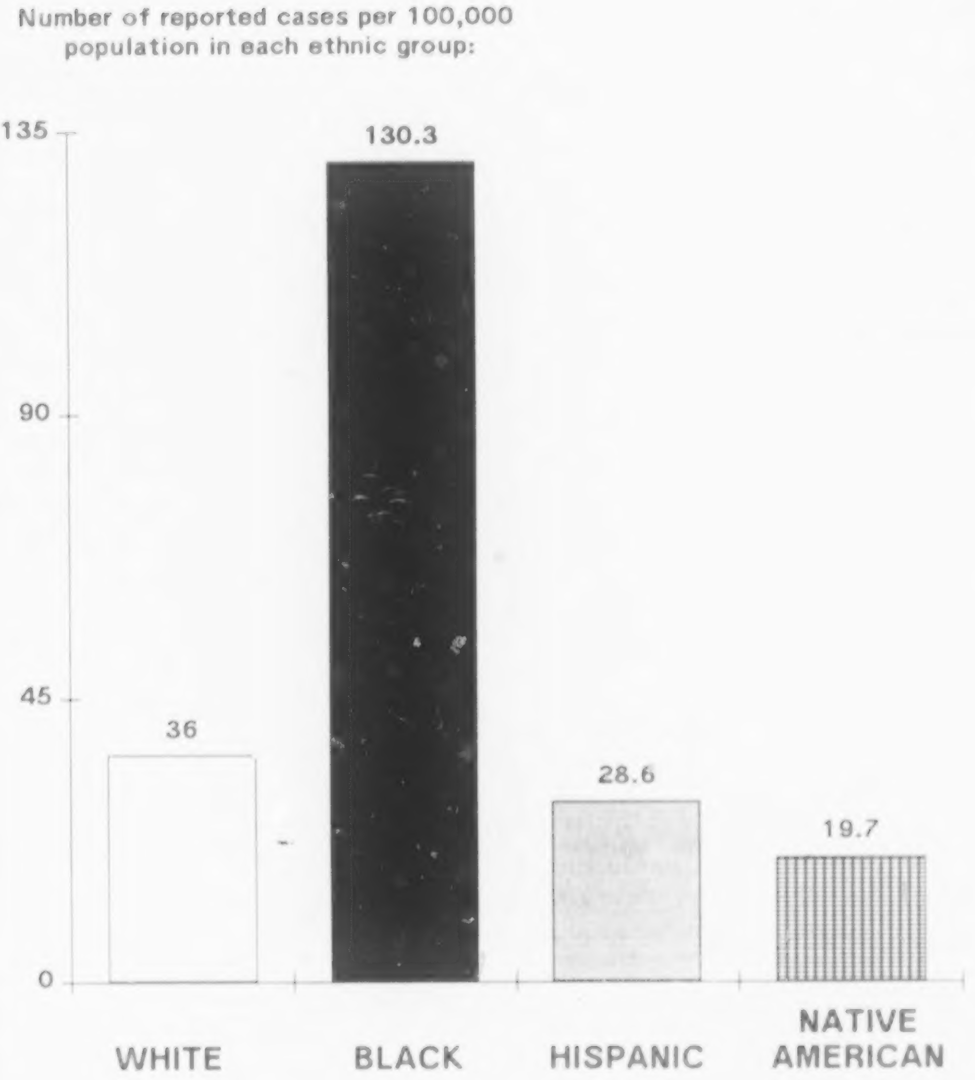


RATES OF RESISTANT GONORRHEA BY ETHNIC GROUP, ARIZONA, 1990

Source: the number of reported cases was provided by the Sexually Transmitted Disease Section in the Division of Disease Prevention, ADHS.

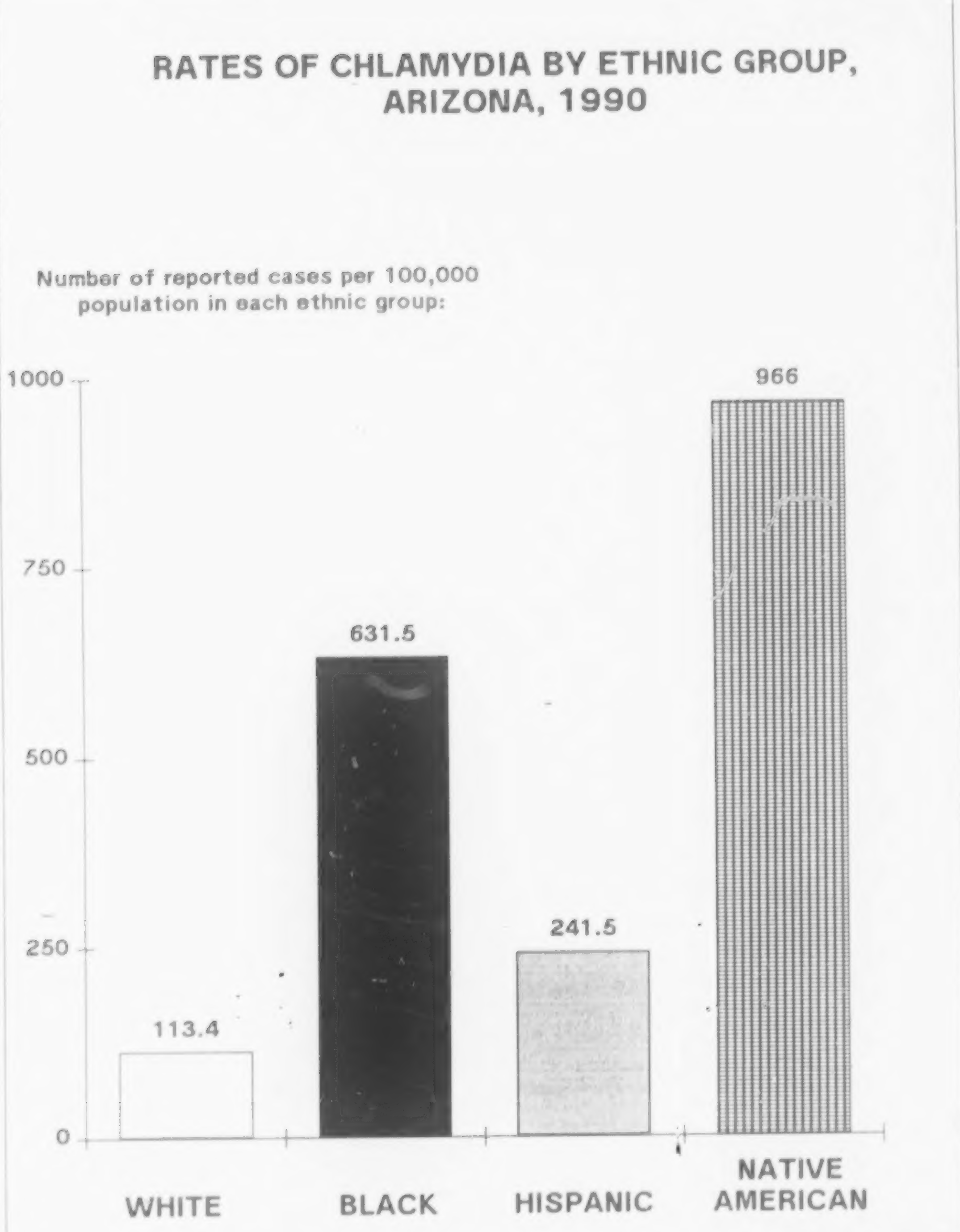
FIGURE 48.

RATES OF HERPES BY ETHNIC GROUP, ARIZONA, 1990



Source: the number of reported cases was provided by the Sexually Transmitted Disease Section in the Division of Disease Prevention, ADHS.

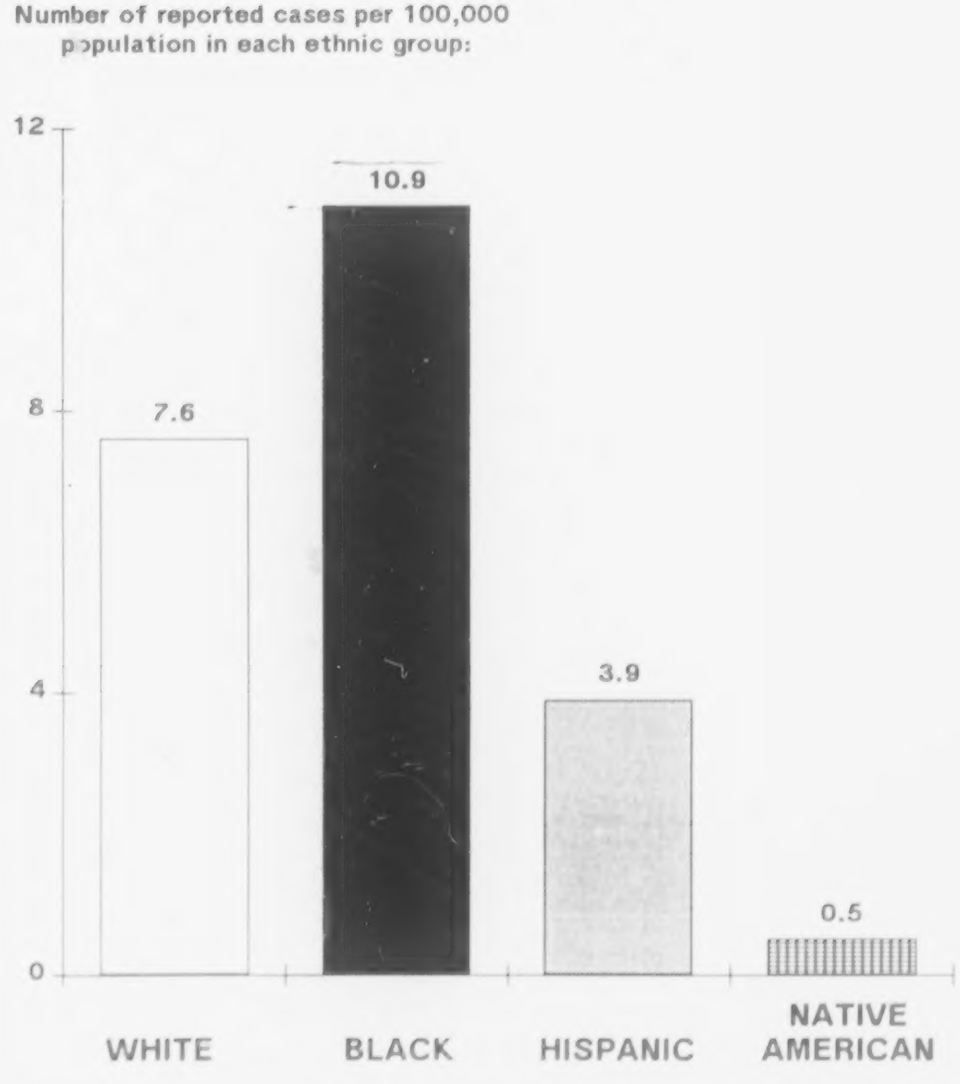
FIGURE 49.



Source: the number of reported cases was provided by the Sexually Transmitted Disease Section in the Division of Disease Prevention, ADHS.

FIGURE 50.

RATES OF REPORTED AIDS CASES BY ETHNIC GROUP, ARIZONA, 1990



Source: the number of reported cases was provided by Office of HIV/AIDS Services in the Division of Disease Prevention, ADHS.

Part II:

VITAL STATISTICS

POPULATION STATISTICS

TABLE 5-1
POPULATION BY COUNTY OF RESIDENCE ARIZONA, 1980 AND 1990[1]

County of Residence	1980	1990
ARIZONA	2,718,215	3,665,228
Apache	52,108	61,591
Cochise	85,686	97,624
Coconino	75,008	96,591
Gila	37,080	40,216
Graham	22,862	26,554
Greenlee	11,406	8,008
La Paz[2]	12,557	13,844
Maricopa	1,509,175	2,122,101
Mohave	55,865	93,497
Navajo	67,629	77,658
Pima	531,443	666,880
Pinal	90,918	116,379
Santa Cruz	20,459	29,676
Yavapai	68,145	107,714
Yuma	76,205	106,895

[1] The county population figures for Arizona for 1980 and 1990 as released by the U.S. Census Bureau.

[2] La Paz county included in Yuma county prior to 1983.

TABLE 5-2

POPULATION BY AGE GROUP AND GENDER IN URBAN AND RURAL AREAS,[1] ARIZONA, 1980 AND 1990

Area and Gender	Under 1	1-14	15-19	20-44	45-64	65+	TOTAL
URBAN, total							
1980	35,665	425,203	185,908	775,355	381,915	236,730	2,040,676
1990	40,271	600,856	201,407	1,179,723	502,037	371,582	2,895,876
MALE							
1980	18,259	217,720	94,528	388,302	179,506	101,848	1,000,162
1990	20,531	307,375	103,363	597,846	240,538	156,788	1,426,441
FEMALE							
1980	17,406	207,483	91,380	387,053	202,409	134,882	1,040,514
1990	19,740	293,481	98,044	581,877	261,499	214,794	1,469,435
RURAL, total							
1980	11,880	171,775	66,109	230,231	126,812	70,632	677,539
1990	11,142	180,687	59,515	263,805	147,011	107,192	769,352
MALE							
1980	6,081	86,248	33,755	116,348	61,164	34,183	337,780
1990	5,698	92,176	30,908	134,225	71,094	50,149	384,250
FEMALE							
1980	5,799	85,527	32,354	113,883	65,648	36,449	339,759
1990	5,444	88,511	28,607	129,580	75,917	57,043	385,102
STATEWIDE TOTAL							
1980	47,545	596,978	252,017	1,005,586	508,727	307,362	2,718,215
1990	51,413	781,543	260,922	1,443,528	649,048	478,774	3,665,228
MALE							
1980	24,340	303,968	128,283	504,650	240,675	136,031	1,337,942
1990	26,229	399,551	134,271	732,071	311,632	206,937	1,810,691
FEMALE							
1980	23,205	293,010	123,734	500,936	268,057	171,331	1,380,273
1990	25,184	381,992	126,651	711,457	337,416	271,837	1,854,537

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[1] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas. The population counts are from the U.S. Census Bureau.

TABLE 5-3

POPULATION BY AGE GROUP, GENDER AND ETHNICITY, ARIZONA, 1990[1]

	Under 1	1-14	15-19	20-44	45-64	65+	TOTAL
All ethnic groups:	51,413	781,543	260,922	1,443,528	649,048	478,774	3,665,228
Male	26,229	399,551	134,271	732,071	311,632	206,937	1,810,691
Female	25,184	381,992	126,651	711,457	337,416	271,837	1,854,537
WHITE	28,903	459,282	160,777	1,017,702	516,908	424,061	2,607,633
Male	14,857	235,654	82,668	574,828	248,889	183,023	1,279,919
Female	14,046	223,628	78,109	502,874	268,019	241,038	1,327,714
HISPANIC	14,715	211,529	65,853	275,889	85,076	35,276	688,338
Male	7,482	107,902	33,924	142,072	40,880	15,399	347,659
Female	7,233	103,627	31,929	133,817	44,196	19,877	340,679
BLACK	2,065	30,310	9,604	47,358	14,335	6,852	110,524
Male	1,043	15,487	5,157	25,739	7,220	2,912	57,558
Female	1,022	14,823	4,447	21,619	7,115	3,940	52,966
NATIVE AMERICAN	4,986	68,335	19,896	75,446	24,700	10,164	203,527
Male	2,451	34,357	9,968	36,495	11,365	4,498	99,134
Female	2,535	33,978	9,928	38,951	13,335	5,666	104,393
ASIAN	744	12,087	4,792	27,133	8,029	2,421	55,206
Male	396	6,151	2,554	12,937	3,278	1,105	26,421
Female	348	5,936	2,238	14,196	4,751	1,316	28,785

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[1] The population figures for 1980 and 1990 for Black, Native American, Asian or Pacific Islander or Hispanic residents of Arizona are those released by the U.S. Census Bureau. Unless otherwise specified, the category White refers in this report to persons who did not identify themselves with any of these racial or Hispanic origin groups.

TABLE 5-4

POPULATION BY AGE GROUP AND ETHNICITY IN URBAN AND RURAL AREAS, ARIZONA, 1990[1]

	Under 1	1-14	15-19	20-44	45-64	65+	TOTAL
URBAN							
All ethnic groups:[2]	40,271	600,856	201,407	1,179,723	502,037	371,582	2,895,876
WHITE	24,253	373,283	130,598	861,321	410,798	335,940	2,136,193
HISPANIC	2,139	170,775	52,632	226,987	64,632	24,983	552,148
NATIVE AMERICAN	1,375	18,732	5,492	25,003	6,723	2,451	59,776
BLACK	1,838	27,191	8,462	41,725	12,823	6,069	98,108
RURAL							
All ethnic groups:[2]	11,142	180,687	59,515	263,805	147,011	107,192	769,352
WHITE	4,650	85,999	30,179	156,381	106,110	88,121	471,440
HISPANIC	2,576	40,754	13,221	48,902	20,444	10,293	136,190
NATIVE AMERICAN	3,611	49,603	14,404	50,443	17,977	7,713	143,751
BLACK	227	3,119	1,142	5,633	1,512	783	12,416
STATEWIDE							
All ethnic groups:[2]	51,413	781,543	260,922	1,443,528	649,048	478,774	3,665,228
WHITE	28,903	459,282	160,777	1,017,702	516,908	424,061	2,607,633
HISPANIC	14,715	211,529	65,853	275,889	85,076	35,276	688,338
NATIVE AMERICAN	4,986	68,335	19,896	75,446	24,700	10,164	203,527
BLACK	2,065	30,310	9,604	47,358	14,335	6,852	110,524

[1] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas. The population counts are from the U.S. Census Bureau.

[2] The population figures for 1980 and 1990 for Black, Native American or Hispanic residents of Arizona are those released by the U.S. Census Bureau. Unless otherwise specified, the category White refers in this report to persons who did not identify themselves with any of these racial or Hispanic origin groups. The totals for all ethnic groups include ethnic groups other than Black, Native American, Hispanic or White.

TABLE 5-5

POPULATION BY COUNTY OF RESIDENCE AND ETHNICITY ARIZONA, 1990[1]

	TOTAL	WHITE[2]	HISPANIC	BLACK	NATIVE AMERICAN	ASIAN
ARIZONA:	3,665,228	2,607,633	688,338	110,524	203,527	55,206
Apache	61,591	10,995	2,599	100	47,803	94
Cochise	97,624	61,130	28,379	5.078	790	2,247
Coconino	96,591	56,382	9,696	1,419	28,233	861
Gila	40,216	27,253	7,486	99	5,238	140
Graham	26,554	15,313	6,682	502	3,951	106
Greenlee	8,008	4,325	3,456	28	183	16
La Paz	13,844	8,083	3,139	118	2,402	102
Maricopa	2,122,101	1,628,035	345,498	74,257	38,017	36,294
Mohave	93,497	85,561	4,919	303	2,145	569
Navajo	77,658	30,622	5,652	703	40,417	264
Pima	666,880	450,529	163,262	20,795	20,330	11,964
Pinal	116,379	67,382	34,062	3,648	10,785	502
Santa Cruz	29,676	6,130	23,221	97	64	164
Yavapai	104,714	98,264	6,899	321	1,740	490
Yuma	106,895	57,629	43,388	3,056	1,429	1,393

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[1] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas. The population counts are from the U.S. Census Bureau.

[2] The population figures for 1980 and 1990 for Black, Native American, Asian or Pacific Islander or Hispanic residents of Arizona are those released by the U.S. Census Bureau. Unless otherwise specified, the category White refers in this report to persons who did not identify themselves with any of these racial or Hispanic origin groups.

TABLE 5-6

FEMALE POPULATION OF CHILDBEARING AGE (15-44 years) BY COUNTY OF RESIDENCE AND ETHNICITY, ARIZONA, 1990[1]

	TOTAL	WHITE[2]	HISPANIC	BLACK	NATIVE AMERICAN	ASIAN
ARIZONA:	838,108	580,983	165,746	26,066	48,879	16,434
Apache	13,554	2,278	531	15	10,705	25
Cochise	20,359	12,010	6,264	1,130	166	789
Coconino	26,061	16,171	2,498	313	6,805	274
Gila	7,213	4,486	1,483	21	1,180	43
Graham	5,078	2,777	1,283	46	944	28
Greenlee	1,635	864	714	7	44	6
La Paz	2,497	1,156	718	24	574	25
Maricopa	500,829	376,991	84,420	18,362	10,515	10,541
Mohave	16,686	14,941	1,040	53	511	141
Navajo	16,513	6,079	1,173	94	9,101	66
Pima	156,529	102,490	40,725	4,629	4,967	3,718
Pinal	23,084	12,509	7,165	685	2,578	147
Santa Cruz	6,761	1,041	5,643	15	18	44
Yavapai	18,746	16,701	1,415	53	437	140
Yuma	22,563	10,489	10,674	619	334	447

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[1] The population figures for 1980 and 1990 for Black, Native American, Asian or Pacific Islander and Hispanic residents of Arizona are those released by the U.S. Census Bureau. Unless otherwise specified, the category "White" refers in this report to persons who did not identify themselves with any of these racial or Hispanic origin groups.

[2] Not of Hispanic origin.

[3] Asian or Pacific Islander.

BIRTH STATISTICS

TABLE 6-1

RATES OF NATURAL INCREASE FROM BIRTHS PER 1,000 POPULATION, BY COUNTY OF RESIDENCE, ARIZONA AND UNITED STATES, 1980-1990

AREA	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Apache	25.4	26.2	27.4	26.2	29.0	27.1	23.5	24.2	24.3	21.6	22.9
Cochise	10.8	11.4	10.1	9.4	10.4	9.1	8.8	8.4	8.7	9.3	9.6
Coconino	20.2	17.8	17.1	18.3	17.9	18.2	16.2	17.5	16.4	16.9	16.2
Gila	10.1	11.3	10.3	7.6	7.2	6.8	5.7	4.0	6.1	5.5	7.1
Graham	14.9	14.0	12.7	10.4	11.3	10.2	8.4	10.2	8.8	9.3	7.7
Greenlee	16.3	20.4	13.9	10.3	11.3	13.1	5.8	5.9	4.9	5.8	5.9
La Paz[1]	NA	NA	NA	6.5	3.0	6.9	6.2	3.3	4.0	5.0	2.2
Maricopa	10.0	10.2	10.2	10.0	10.0	11.2	11.1	11.0	11.0	11.0	11.6
Mohave	5.8	5.9	4.8	5.6	5.9	2.9	3.5	3.7	3.1	4.3	4.5
Navajo	22.0	20.2	21.0	20.9	20.3	19.8	19.1	20.1	19.1	18.7	18.7
Pima	8.7	8.9	8.6	8.8	8.1	8.7	8.3	7.6	8.6	8.3	8.8
Pinal	12.2	12.3	12.7	11.2	10.5	12.7	10.7	11.2	9.8	9.1	9.7
Santa Cruz	18.5	18.6	16.2	14.4	16.1	13.8	13.0	13.3	15.7	17.0	21.7
Yavapai	2.0	2.6	2.6	0.9	0.4	0.4	1.1	- 0.5	0.7	-0.1	-0.1
Yuma	12.1	13.8	12.2	13.0	13.5	13.8	14.8	14.4	14.7	17.4	16.5
ARIZONA	10.6	10.8	10.6	10.3	10.1	10.9	10.6	10.6	10.5	10.5	11.0
U.S.[2]	7.0	7.3	7.5	6.9	6.9	7.1	6.8	7.0	7.1	7.5	8.1

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[1] Included in Yuma County prior to 1983.

[2] U.S. data from the National Center for Health Statistics. Rates for 1980-1988 are final. Rates for 1989-1990 are provisional.

TABLE 6-2

BIRTHS BY COUNTY OF RESIDENCE
ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	50,049	51,620	52,628	52,919	55,109	59,344	60,822	63,320	65,544	67,128	68,814
Apache	1,627	1,681	1,845	1,787	1,817	1,853	1,757	1,852	1,892	1,781	1,800
Cochise	1,570	1,646	1,555	1,565	1,618	1,559	1,524	1,606	1,638	1,730	1,738
Coconino	1,824	1,733	1,768	1,808	1,813	1,946	1,828	2,006	1,966	2,040	1,965
Gila	705	760	810	683	672	642	625	569	659	651	749
Graham	512	509	468	435	446	406	395	445	418	448	424
Greenlee	272	299	256	185	195	161	106	124	111	104	105
La Paz[1]	NA	NA	NA	236	195	234	215	198	214	217	162
Maricopa	26,769	27,800	28,598	28,758	30,711	33,780	35,334	36,624	38,108	39,179	40,414
Mohave	871	886	886	926	988	968	1,065	1,177	1,225	1,353	1,488
Navajo	1,899	1,816	1,883	1,911	1,864	1,895	1,896	1,981	1,957	1,993	1,972
Pima	8,931	9,130	9,155	9,585	9,678	10,278	10,423	10,924	11,217	11,257	11,412
Pinal	1,840	1,899	1,945	1,869	1,849	2,049	2,053	2,126	2,094	2,097	2,133
Santa Cruz	499	519	491	457	512	523	504	547	665	700	784
Yavapai	937	998	1,067	1,032	999	1,088	1,129	1,171	1,285	1,244	1,220
Yuma	1,793	1,944	1,901	1,682	1,752	1,962	1,968	1,970	2,095	2,334	2,448

[1] Included in Yuma County until January 1, 1983.

TABLE 6-3

BIRTHS BY COUNTY OF OCCURRENCE,[1] ARIZONA, 1980-90

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	50,068	51,604	52,368	52,544	54,889	59,305	60,775	63,347	65,657	67,330	68,895
Apache	1,237	1,228	1,318	1,259	1,419	1,663	1,641	1,776	1,854	1,763	1,634
Cochise	1,511	1,618	1,500	1,453	1,513	1,474	1,420	1,484	1,560	1,627	1,637
Coconino	2,263	2,114	2,239	2,207	2,188	2,264	2,163	2,349	2,238	2,332	2,393
Gila	576	613	668	560	570	538	510	438	449	499	602
Graham	397	407	376	360	374	412	400	474	434	467	482
Greenlee	309	306	256	173	178	89	8	5	6	3	1
La Paz[2]	NA	NA	NA	3	4	2	5	1	3	6	3
Maricopa	28,076	29,194	30,038	30,314	32,191	35,410	36,902	38,457	39,959	41,021	42,127
Mohave	861	876	834	858	909	975	1,029	1,084	1,147	1,308	1,399
Navajo	1,183	1,107	1,158	1,243	1,210	1,155	1,080	1,136	1,158	1,204	1,129
Pima	9,906	10,208	10,111	10,307	10,415	11,036	11,161	11,745	12,106	12,096	12,258
Pinal	920	905	902	850	873	973	1,025	879	842	870	924
Santa Cruz	310	316	253	282	344	326	361	437	559	614	690
Yavapai	846	926	1,002	952	925	1,009	1,051	1,079	1,180	1,130	1,109
Yuma	1,673	1,786	1,713	1,723	1,776	1,979	2,019	2,003	2,162	2,390	2,507

[1] Resident 67,951 and non-resident 944 births occurring in Arizona.
[2] Included in Yuma County Prior to 1983.

TABLE 6-4

RESIDENT BIRTHS BY MONTH OF OCCURRENCE
ARIZONA, 1980-90

	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL
1980	4,006	3,748	4,069	3,822	4,039	3,982	4,497	4,369	4,707	4,414	4,060	4,336	50,049
Percent	8.0	7.5	8.1	7.6	8.1	8.0	9.0	8.7	9.4	8.8	8.1	8.7	100.0
1981	4,139	3,868	4,311	3,934	3,990	4,325	4,533	4,662	4,537	4,647	4,264	4,410	51,620
Percent	8.0	7.5	8.4	7.6	7.7	8.4	8.8	9.0	8.8	9.0	8.3	8.5	100.0
1982	4,252	3,925	4,355	4,160	4,107	4,280	4,608	4,691	4,798	4,634	4,300	4,518	52,628
Percent	8.1	7.5	8.3	7.9	7.8	8.8	8.8	8.9	9.1	8.8	8.2	8.6	100.0
1983	4,420	4,016	4,532	4,291	4,181	4,195	4,545	4,866	4,721	4,529	4,230	4,393	52,919
Percent	8.4	7.6	8.6	8.1	7.9	7.9	8.6	9.2	8.9	8.6	8.0	8.3	100.0
1984	4,397	4,209	4,456	4,244	4,331	4,368	4,954	4,979	5,013	4,842	4,693	4,623	55,109
Percent	8.0	7.6	8.1	7.7	7.9	7.9	9.0	9.0	9.1	8.8	8.6	8.3	100.0
1985	4,841	4,435	4,814	4,460	4,820	4,693	5,231	5,476	5,228	5,196	4,994	5,156	59,344
Percent	8.2	7.5	8.1	7.5	8.1	7.9	8.8	9.2	8.8	8.8	8.4	8.7	100.0
1986	4,915	4,572	4,947	4,696	4,799	4,935	5,452	5,489	5,552	5,367	4,800	5,298	60,822
Percent	8.1	7.5	8.1	7.7	7.9	8.1	9.0	9.0	9.1	8.8	7.9	8.7	100.0
1987	5,108	4,831	5,243	5,034	5,006	5,136	5,647	5,599	5,562	5,442	5,179	5,533	63,320
Percent	8.1	7.6	8.3	8.0	7.9	8.1	8.9	8.8	8.8	8.6	8.2	8.7	100.0
1988	5,303	5,130	5,342	5,105	5,247	5,501	5,633	5,980	5,816	5,584	5,311	5,592	65,544
Percent	8.1	7.8	8.2	7.8	8.0	8.4	8.6	9.1	8.9	8.5	8.1	8.5	100.0
1989	5,330	5,049	5,549	5,217	5,435	5,568	5,772	6,096	6,089	5,711	5,594	5,718	67,128
Percent	7.9	7.5	8.3	7.8	8.1	8.3	8.6	9.1	9.1	8.5	8.3	8.5	100.0
1990	5,589	5,235	5,805	5,316	5,627	5,621	6,131	6,188	6,030	5,888	5,635	5,749	68,814
Percent	8.1	7.6	8.4	7.7	8.2	8.2	8.9	9.0	8.8	8.6	8.2	8.4	100.0

TABLE 6-5

BIRTHS BY MONTH AND DAY OF OCCURRENCE, ARIZONA RESIDENTS, 1990

Day of Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
01	142	203	199	125	176	197	149	230	164	213	190	140
02	162	182	182	207	208	185	219	228	159	232	206	141
03	188	143	183	207	186	150	197	203	172	195	151	208
04	174	178	143	216	211	196	188	175	210	202	167	215
05	209	182	171	196	152	201	205	147	226	224	189	209
06	161	201	187	184	133	196	190	175	201	163	213	213
07	148	195	184	151	178	214	149	205	218	150	152	224
08	189	199	215	158	191	184	166	198	193	205	203	151
09	192	201	203	160	180	155	203	212	163	206	197	149
10	187	147	161	195	168	131	227	238	207	212	182	188
11	190	153	162	189	185	198	225	185	194	199	150	212
12	200	197	180	194	157	209	229	174	216	190	186	200
13	145	193	205	160	143	212	186	190	219	184	231	204
14	146	217	195	168	215	190	206	218	213	129	231	200
15	167	219	230	132	194	178	150	205	186	170	200	159
16	188	183	198	178	176	159	218	217	172	226	198	155
17	210	134	184	216	194	166	238	185	210	181	192	193
18	199	157	173	184	190	185	225	154	234	187	142	226
19	184	189	200	192	168	210	200	152	251	194	192	197
20	168	214	215	194	138	195	211	210	226	166	242	227
21	152	220	191	162	177	211	188	220	213	132	203	232
22	174	201	206	121	195	197	154	241	178	191	145	161
23	221	197	190	202	204	149	198	225	160	196	201	139
24	197	158	156	188	196	167	224	239	217	223	161	181
25	225	159	145	188	200	201	215	171	231	207	153	153
26	206	193	189	202	151	205	232	152	211	225	210	204
27	149	214	232	205	152	217	194	206	207	169	205	189
28	133	206	206	159	161	205	179	193	238	142	181	207
29	182		192	127	217	194	155	215	173	185	181	163
30	192		177	156	216	164	205	189	168	214	181	134
31	209		151		215		206	236		176		175
TOTAL	5,589	5,235	5,805	5,316	5,627	5,621	6,131	6,188	6,030	5,888	5,635	5,749

TABLE 6-6

RESIDENT BIRTHS BY PLACE OF OCCURRENCE AND NON-RESIDENT BIRTHS OCCURRING IN ARIZONA BY COUNTY OF OCCURRENCE, ARIZONA, 1990

	PLACE OF BIRTH																	
PLACE OF RESIDENCE:	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma	ARIZONA TOTAL[1]	OTHER STATE[2]	ARIZONA RESIDENTS, TOTAL[3]
Apache	1,258	0	33	0	0	0	0	72	0	62	1	0	0	0	0	1,426	374	1,800
Cochise	0	1,542	0	0	14	0	0	7	0	0	170	0	0	0	0	1,733	5	1,738
Coconino	5	0	1,775	0	0	0	0	71	7	55	4	0	0	6	0	1,923	42	1,965
Gila	0	0	0	554	3	0	0	159	0	6	25	0	0	2	0	749	0	749
Graham	0	4	0	12	367	0	0	12	0	1	27	0	0	0	0	423	1	424
Greenlee	0	0	0	0	90	1	0	2	0	0	9	0	0	0	0	102	3	105
La Paz	0	0	0	0	0	0	3	33	96	0	0	0	0	0	2	134	28	162
Maricopa	8	4	23	6	1	0	0	40,256	1	5	25	14	1	8	2	40,354	60	40,414
Mohave	2	0	3	0	0	0	0	42	1,225	0	2	0	0	3	0	1,277	211	1,488
Navajo	205	0	475	3	0	0	0	180	0	996	3	1	0	0	0	1,863	109	1,972
Pima	1	3	2	1	1	0	0	38	0	0	11,337	4	7	0	3	11,397	15	11,412
Pinal	2	0	0	22	1	0	0	961	0	1	240	901	0	0	0	2,128	5	2,133
Santa Cruz	0	1	0	0	0	0	0	1	0	0	186	0	596	0	0	784	0	784
Yavapai	0	0	39	2	0	0	0	86	1	0	2	0	0	1,088	0	1,218	2	1,220
Yuma	0	0	0	0	0	0	0	72	0	0	5	0	0	0	2,363	2,440	8	2,448
ARIZONA RESIDENTS, TOTAL[4]	1,481	1,554	2,350	600	477	1	3	41,992	1,330	1,126	12,036	920	604	1,107	2,370	67,951	863	68,814
RESIDENTS OF OTHER STATES[5]	153	83	43	2	5	0	0	135	69	3	222	4	86	2	137	944		
TOTAL BORN[6]	1,634	1,637	2,393	602	482	1	3	42,127	1,399	1,129	12,258	924	690	1,109	2,507	68,895		

[1] Number of live births to residents of specified county occurring in the state.

[2] Number of live births to residents of specified county occurring out-of-state.

[3] Total number of live births to residents of specified county.

[4] Number of live births occurring in specified county to residents of the state.

[5] Number of live births occurring in specified county to out-of-state residents.

[6] Total number of live births occurring in specified county to Arizona Residents and non-residents.

TABLE 6-7

BIRTHS BY MOTHER'S AGE GROUP AND COUNTY OF RESIDENCE
ARIZONA, 1990

County of Residence	AGE GROUP OF MOTHER <15	15-19	20-24	25-29	30-34	35-39	40-44	>44	Unknown	All Births
ARIZONA, TOTAL	188	9,579	19,316	20,848	13,299	4,777	767	27	13	68,814
Apache	5	252	513	485	355	158	30	2	0	1,800
Cochise	6	269	578	486	272	106	18	2	1	1,738
Coconino	5	269	571	542	375	169	33	1	0	1,965
Gila	3	164	222	201	95	50	14	0	0	749
Graham	1	75	143	109	65	26	5	0	0	424
Greenlee	0	21	32	33	12	5	2	0	0	105
La Paz	0	33	47	37	33	10	2	0	0	162
Maricopa	119	5,339	11,036	12,610	8.137	2,745	409	11	8	40,414
Mohave	4	226	444	453	249	94	17	0	1	1,488
Navajo	7	313	594	563	322	136	35	2	0	1,972
Pima	26	1,504	3,184	3,432	2,301	830	132	3	0	11,412
Pinal	10	522	604	546	316	111	20	2	2	2,133
Santa Cruz	0	95	207	246	151	79	5	1	0	784
Yavapai	0	157	352	347	228	113	20	2	1	1,220
Yuma	2	340	789	758	388	145	25	1	0	2,448

TABLE 6-8

RESIDENT BIRTHS BY MOTHER'S AGE GROUP AND ETHNICITY, ARIZONA, 1980, 1985 AND 1990

Year	Ethnic Group	Total	-15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Not Stated
1980	Total, all groups:[1]	50,049	138	8,173	17,897	14,487	6,951	2,002	378	19	4
	WHITE[2]	31,597	45	4,161	11,320	9,900	4,774	1,210	178	7	2
	HISPANIC[3]	11,495	45	2,512	4,143	2,904	1,331	446	106	8	0
	BLACK	1,634	21	424	632	376	135	35	11	0	0
	NATIVE AMERICAN	4,796	26	1,057	1,660	1,121	577	277	80	4	0
	OTHER	527	1	25	142	186	134	34	3	0	2
1985	Total, all groups:	59,344	110	7,916	19,721	17,979	9,990	3,126	483	15	4
	WHITE	37,972	28	3,996	12,217	12,415	6,983	2,045	281	5	2
	HISPANIC	13,062	39	2,490	4,657	3,419	1,760	579	110	7	1
	BLACK	1,969	15	417	753	488	203	86	7	0	0
	NATIVE AMERICAN	5,478	25	980	1,916	1,321	805	349	78	3	1
	OTHER	863	3	33	178	336	239	67	7	0	0
1990	Total, all groups:	68,814	188	9,579	23,536	16,628	13,299	4,777	767	23	17
	WHITE	39,733	44	4,072	12,589	10,500	8,918	3,144	444	13	9
	HISPANIC	19,321	88	3,853	7,455	4,044	2,711	969	187	7	7
	BLACK	2,562	23	539	986	518	375	110	11	0	0
	NATIVE AMERICAN	6,231	32	1,069	2,281	1,291	1,007	445	103	3	0
	OTHER	967	1	46	225	275	288	109	22	0	1

[1] Totals for all ethnic groups include records with unknown ethnicity.

[2] Non-Hispanic.

[3] White of Hispanic origin.

TABLE 6-9

LIVE BIRTHS BY MOTHER'S ETHNIC GROUP AND CHILD'S ETHNIC GROUP BY YEAR, ARIZONA, 1980 - 1990

	MOTHER'S ETHNIC GROUP:						CHILD'S ETHNIC GROUP				
YEAR	TOTAL	WHITE[1]	HISPANIC[2]	BLACK	NATIVE AMERICAN	OTHER	WHITE[3]	HISPANIC[4]	BLACK	NATIVE AMERICAN	OTHER
1980	50,049	31,597	11,495	1,634	4,796	527	29,226	13,082	2,062	5,061	618
1981	51,620	32,495	11,896	1,759	4,878	592	29,990	13,651	2,201	5,097	681
1982	52,628	33,419	11,630	1,800	5,137	642	30,695	13,514	2,291	5,366	762
1983	52,919	33,664	11,477	1,820	5,297	661	31,004	13,279	2,340	5,510	786
1984	55,109	35,183	12,067	1,911	5,265	683	32,464	13,784	2,457	5,598	806
1985	59,344	37,972	13,062	1,969	5,478	863	34,879	14,998	2,525	5,903	1,039
1986	60,822	38,044	14,044	2,157	5,718	859	35,379	16,232	2,730	5,652	829
1987	63,320	39,616	14,402	2,289	6,036	977	36,960	16,646	2,887	5,973	954
1988	65,544	39,821	15,952	2,406	6,240	1,125	36,903	18,306	3,075	6,163	1,097
1989	67,128	39,484	17,663	2,528	6,338	1,115	36,767	19,900	3,085	6,296	1,080
1990	68,814	39,733	19,321	2,562	6,231	967	36,938	21,598	3,155	6,183	940

[1] White non-Hispanic mother.
[2] Mother of Hispanic origin.
[3] White non-Hispanic child.
[4] Either one or both parents are of Hispanic origin.

TABLE 6-10

RESIDENT LIVE BIRTHS BY MOTHER'S ETHNICITY AND AGE GROUP, ARIZONA, 1990

Age	All Ethnic Groups	White[1]	Non-White[2]	Hispanic All Races	Non Hispanic All Races	WHITE			BLACK			NATIVE AMERICAN			OTHER		
						All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic
< 15	188	132	56	91	97	132	88	44	23	2	21	32	1	31	1	0	1
15-17	3,423	2,784	639	1,591	1,832	2,784	1,554	1,230	235	5	230	388	29	359	16	3	13
18-19	6,156	5,141	1,015	2,338	3,818	5,141	2,299	2,842	304	5	299	681	34	647	30	0	30
20-24	19,316	16,436	2,880	6,399	12,917	16,436	6,319	10,117	808	10	798	1,893	64	1,829	179	6	173
25-29	20,848	18,152	2,696	5,252	15,596	18,152	5,180	12,972	696	9	687	1,679	53	1,626	321	10	311
30-34	13,299	11,629	1,670	2,752	10,547	11,629	2,711	8,918	375	5	370	1,007	26	981	288	10	278
35-39	4,777	4,113	664	983	3,794	4,113	969	3,144	110	1	109	445	10	435	109	3	106
40+	780	654	126	197	583	654	197	457	11	0	11	106	0	106	23	0	23
TOTAL[3]	68,814	59,054	9,760	19,607	49,207	59,054	19,321	39,733	2,562	37	2,525	6,231	217	6,014	967	32	935

[1] Includes Whites of Hispanic origin.
[2] Includes Non-Whites of Hispanic origin.
[3] Includes records with unknown or unspecified age group.

TABLE 6-11

BIRTHS BY MOTHER'S COUNTY OF RESIDENCE AND EDUCATION
ARIZONA, 1990

	TOTAL	YEARS OF EDUCATION						
		<8	8	9-11	12	13-16	17+	Unknown
ARIZONA	68,814	3,446	2,271	13,708	24,261	20,877	2,902	1,349
Apache	1,800	39	43	449	755	403	26	85
Cochise	1,738	84	52	302	620	477	54	149
Coconino	1,965	60	33	417	800	565	79	11
Gila	749	7	21	226	334	141	15	5
Graham	424	8	12	101	180	116	5	2
Greenlee	105	1	2	26	50	23	3	0
La Paz	162	9	10	50	59	26	2	6
Maricopa	40,414	2,203	1,318	7,295	13,584	13,417	1,752	845
Mohave	1,488	20	52	376	674	293	30	43
Navajo	1,972	47	81	555	800	390	35	64
Pima	11,412	481	312	2,257	3,966	3,612	752	32
Pinal	2,133	101	117	597	801	390	27	100
Santa Cruz	784	78	31	250	274	126	25	0
Yavapai	1,220	29	30	247	496	380	35	3
Yuma	2,448	279	157	560	868	518	62	4

TABLE 6-12

BIRTHS BY CHILD'S GENDER AND ETHNIC GROUP AND MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

County of Residence	TOTAL BIRTHS[1]			WHITE[2]			HISPANIC[3]			BLACK			NATIVE AMERICAN			OTHER		
	T	M	F	T[4]	M	F	T[4]	M	F	T	M	F	T	M	F	T	M	F
ARIZONA	68,814	35,105	33,706	36,938	18,961	17,976	21,598	10,955	10,641	3,155	1,613	1,542	6,183	3,109	3,074	940	467	473
Apache	1.800	898	902	193	95	98	60	30	30	5	2	3	1,540	771	769	2	0	2
Cochise	1,738	880	858	800	395	405	730	378	352	151	75	76	7	3	4	50	29	21
Coconino	1,965	1,021	944	773	388	385	216	103	113	52	28	24	918	498	420	6	4	2
Gila	749	384	365	342	176	166	171	85	86	10	5	5	224	118	106	2	0	2
Graham	424	208	216	198	96	102	148	79	69	9	4	5	68	29	39	1	0	1
Greenlee	105	60	45	36	21	15	65	36	29	0	0	0	3	2	1	1	1	0
La Paz	162	80	82	70	37	33	62	30	32	0	0	0	29	13	16	1	0	1
Maricopa	40,414	20,633	19,778	24,492	12,631	11,860	11,906	6,005	5,899	2,225	1,128	1,097	1,170	569	601	621	300	321
Mohave	1,488	749	739	1,260	640	620	168	77	91	5	4	1	48	23	25	7	5	2
Navajo	1,972	1,008	964	479	254	225	148	87	61	16	11	5	1,325	655	670	4	1	3
Pima	11,412	5,878	5,534	5,659	2,905	2,754	4,605	2,376	2,229	473	254	219	472	237	235	203	106	97
Pinal	2,133	1,070	1,063	851	421	430	871	441	430	98	53	45	304	148	156	9	7	2
Santa Cruz	784	389	395	55	22	33	724	363	361	3	3	0	1	1	0	1	0	1
Yavapai	1,220	632	588	987	500	487	184	99	85	5	3	2	41	28	13	3	2	1
Yuma	2,448	1,215	1,233	743	380	363	1,540	766	774	103	43	60	33	14	19	29	12	17

[1] Includes records with unknown or unspecified ethnic group.

[2] Non-Hispanic child.

[3] Either one or both parents are of Hispanic origin.

[4] Includes records with unknown or unspecified gender.

NOTE: The race of the child is derived from the parents' race. If father is white or not classifiable, the child assumes mother's race; else, the child assumes father's race.

TABLE 6-13

BIRTHS BY MOTHER'S ETHNIC GROUP, COUNTY OF RESIDENCE AND CHILD'S GENDER, ARIZONA, 1990

County of Residence	TOTAL BIRTHS[1]			WHITE[2]			HISPANIC[3]			NATIVE AMERICAN			BLACK			OTHER		
	T[4]	M	F	T[4]	M	F	T[4]	M	F	T	M	F	T	M	F	T	M	F
ARIZONA	68,814	35,105	33.706	39.733	20,411	19,321	19,321	9,776	9.543	6,231	3,135	3,096	2.562	1,309	1,253	967	474	493
Apache	1,800	898	902	204	100	104	49	25	24	1,545	773	772	0	0	0	2	0	2
Cochise	1,738	880	858	913	453	460	646	332	314	8	3	5	114	60	54	57	32	25
Coconino	1,965	1,021	944	836	419	417	167	79	88	925	499	426	30	19	11	7	5	2
Gila	749	384	365	376	192	184	137	69	68	226	120	106	8	3	5	2	0	2
Graham	424	208	216	229	114	115	122	63	59	68	29	39	4	2	2	1	0	1
Greenlee	105	60	45	49	28	21	52	29	23	3	2	1	0	0	0	1	1	0
La Paz	162	80	82	79	43	36	53	24	29	29	13	16	0	0	0	1	0	1
Maricopa	40,414	20,633	19,778	26,048	13,435	12.612	10,659	5,362	5,295	1,189	581	608	1,885	953	932	633	302	331
Mohave	1,488	749	739	1.304	661	643	126	58	68	48	23	25	3	2	1	7	5	2
Navajo	1,972	1,008	964	521	281	240	108	61	47	1,332	661	671	7	4	3	4	1	3
Pima	11,412	5,878	5,534	6,281	3,221	3,060	4,103	2,130	1,973	476	239	237	346	182	164	206	106	100
Pinal	2,133	1,070	1,063	938	467	471	789	397	392	305	148	157	90	51	39	11	7	4
Santa Cruz	784	389	395	75	35	40	706	352	354	1	1	0	1	1	0	1	0	1
Yavapai	1,220	632	588	1,041	534	507	132	66	66	41	28	13	3	2	1	3	2	1
Yuma	2,448	1,215	1,233	839	428	411	1,472	729	743	35	15	20	71	30	41	31	13	18

[1] Includes records with unknown or unspecified ethnic group.
[2] Non-Hispanic mother.
[3] Mother is white of Hispanic origin.
[4] Includes records with unknown or unspecified gender.

TABLE 6-14

LOW-BIRTHWEIGHT BIRTHS BY MOTHER'S ETHNICITY AND COUNTY OF RESIDENCE, ARIZONA, 1990

County of Residence	Total LBW Births	White[1]	Hispanic[2]	Black	Native American	Other
ARIZONA	4,451	2,472	1,237	295	378	69
Apache	117	19	4	0	94	0
Cochise	112	63	33	10	1	5
Coconino	145	67	18	3	56	1
Gila	48	30	7	0	11	0
Graham	20	12	4	1	3	0
Greenlee	5	2	3	0	0	0
La Paz	12	4	5	0	2	1
Maricopa	2,615	1,545	724	226	69	51
Mohave	1,488	92	5	0	1	1
Navajo	151	47	8	0	96	0
Pima	717	413	236	35	24	9
Pinal	145	63	52	14	15	1
Santa Cruz	784	4	55	0	0	0
Yavapai	83	67	12	0	4	0
Yuma	123	44	71	6	2	0

[1] Non-Hispanic mother.
[2] White mother of Hispanic origin.

TABLE 6-15

LOW-BIRTHWEIGHT BIRTHS BY COUNTY OF RESIDENCE
ARIZONA, 1980-1990

County of Residence	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	3,089	3,103	3,076	3,204	3,377	3,712	3,785	4,107	4,110	4,279	4,451
Apache	98	109	117	111	109	137	129	120	115	112	117
Cochise	114	122	111	141	125	104	87	109	98	123	112
Coconino	112	112	96	120	113	132	113	115	119	129	165
Gila	38	34	54	31	41	36	50	32	50	39	48
Graham	28	43	22	20	13	29	29	15	26	28	20
Greenlee	14	15	11	10	10	7	4	7	4	9	5
La Paz	NA	NA	NA	25	10	16	18	10	11	17	12
Maricopa	1,628	1,664	1,655	1,695	1,927	2,095	2,232	2,412	2,381	2,455	2,615
Mohave	58	47	72	52	66	52	73	81	88	105	99
Navajo	118	121	95	102	107	109	111	135	116	160	151
Pima	559	549	511	592	562	650	607	695	681	713	717
Pinal	124	120	141	114	103	137	138	145	136	126	145
Santa Cruz	33	21	32	24	16	46	35	36	58	40	59
Yavapai	57	50	66	73	72	69	62	79	95	108	83
Yuma	108	96	93	94	103	93	97	116	132	115	123

TABLE 6-16

LOW-BIRTHWEIGHT BIRTHS BY MOTHER'S AGE GROUP AND COUNTY OF RESIDENCE
ARIZONA, 1990

County of Residence	Total Births[1] All Weights	Total Low-Birthweight Births[2]	Under 15	15-19	20-24	25-29	30-34	35-39	40+
ARIZONA	68,814	4,451	20	788	1,390	944	877	357	74
Apache	1,800	117	0	16	34	24	32	8	3
Cochise	1,738	112	1	21	30	25	21	12	2
Coconino	1,965	145	0	27	38	41	25	12	2
Gila	749	48	0	12	8	12	10	6	0
Graham	424	20	1	3	7	4	5	0	0
Greenlee	105	5	0	2	0	1	2	0	0
La Paz	162	12	0	1	2	4	3	2	0
Maricopa	40,414	2,615	11	471	685	683	528	199	37
Mohave	1,488	99	0	18	24	33	14	9	1
Navajo	1,972	151	1	26	41	35	27	16	5
Pima	11,412	717	4	112	190	199	139	59	14
Pinal	2,133	145	2	33	33	44	26	5	2
Santa Cruz	784	59	0	8	13	16	12	7	3
Yavapai	1,220	83	0	15	21	18	18	8	3
Yuma	2,448	123	0	23	41	28	15	14	2

[1,2] Includes records with unknown or unspecified age group.

TABLE 6-17

LOW-BIRTHWEIGHT BIRTHS BY MOTHER'S ETHNICITY AND AGE GROUP, ARIZONA, 1990

Age	All Ethnic Groups	White[1]	Non-White[2]	Hispanic All Races	Non Hispanic All Races	WHITE			BLACK			NATIVE AMERICAN			OTHER		
						All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic
< 15	20	17	3	9	11	17	9	8	1	0	1	1	0	1	1	0	1
15-17	314	258	56	139	175	258	137	121	36	1	35	20	1	19	0	0	0
18-19	474	398	76	179	295	398	178	220	34	1	33	41	0	41	1	0	1
20-24	1,167	972	195	377	790	972	374	598	71	0	71	105	2	103	19	1	18
25-29	1,167	975	192	275	892	975	271	704	85	2	83	86	2	84	21	0	21
30-34	877	726	151	167	710	726	164	562	54	0	54	80	3	77	17	0	17
35-39	357	299	58	80	277	299	80	219	14	0	14	37	0	37	7	0	7
40+	74	63	11	23	51	63	23	40	0	0	0	8	0	8	3	0	3
TOTAL[3]	4,451	3,709	742	1,250	3,201	3,709	1,237	2,472	295	4	291	378	8	370	69	1	68

[1] Includes Whites of Hispanic origin.
[2] Includes Non-Whites of Hispanic origin.
[3] Includes records with unknown or unspecified ethnicity.

TABLE 6-18

BIRTH RATIOS[1] OF LOW-BIRTHWEIGHT BABIES BY MOTHER'S ETHNICITY AND AGE GROUP, ARIZONA, 1990

Age	All Ethnic Groups	White[2]	Non-White[3]	Hispanic All Races	Non Hispanic All Races	WHITE			BLACK			NATIVE AMERICAN			OTHER		
						All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic	All	Hispanic	Non-Hispanic
< 15	10.6	12.9	5.4	9.9	11.3	12.9	10.7	18.2	4.3	-	4.8	3.1	-	3.2	*	-	*
15-17	9.2	9.3	8.8	8.7	9.6	9.3	8.8	9.8	15.3	*	15.2	5.2	3.4	5.3	-	-	-
18-19	7.7	7.7	7.5	7.7	7.7	7.7	7.7	7.7	11.2	*	11.0	6.0	-	6.3	3.3	-	3.3
20-24	6.0	5.9	6.8	5.9	6.1	5.9	5.9	5.9	8.8	-	8.9	5.5	3.1	5.6	10.6	*	10.4
25-29	5.6	5.4	7.1	5.2	5.7	5.4	5.2	5.4	12.2	*	12.1	5.1	3.8	5.2	6.5	-	6.8
30-34	6.6	6.2	9.0	6.1	6.7	6.2	6.0	6.3	14.4	-	14.6	7.9	11.5	7.8	5.9	-	6.1
35-39	7.5	7.3	8.7	8.1	7.3	7.3	8.3	7.0	12.7	-	12.8	8.3	-	8.5	6.4	-	6.6
40+	9.5	9.6	8.7	11.7	8.7	9.6	11.7	8.8	-	-	-	7.5	-	7.5	13.0	-	13.0
TOTAL	6.5	6.3	7.6	6.4	6.5	6.3	6.4	6.2	11.5	10.8	11.5	6.1	3.7	6.2	7.1	3.1	7.3

[1] Low-birthweight births ratios per 100 live births in corresponding group and calculated only if at least ten live births recorded in 1990.
[2] Includes Whites of Hispanic origin.
[3] Includes Non-Whites of Hispanic origin.
- No low-birthweight births recorded in 1990.
* Fewer than ten live births.

TABLE 6-19

DISTRIBUTION OF LOW-BIRTHWEIGHT BIRTHS AND LBW RISK[1] BY AMOUNT OF PRENATAL CARE AND COUNTY OF RESIDENCE, ARIZONA, 1990

	Distribution of LBW births by number of prenatal visits						Percent distribution of LBW births by number of prenatal visits[2]						Birth ratios[3] of LBW babies by number of prenatal visits				
County of Residence	All amounts	None	1-4	5-8	9+	Unknown	All amounts	None	1-4	5-8	9+	Unknown	All amounts	None	1-4	5-8	9+
ARIZONA	4,451	265	580	1,051	2,420	135	100.0	6.0	13.0	23.6	54.4	3.0	6.5	14.2	11.8	8.3	5.0
Apache	117	9	17	38	50	3	100.0	7.7	14.5	32.5	42.7	2.6	6.5	15.8	9.3	7.5	4.8
Cochise	112	2	15	33	59	3	100.0	1.8	13.4	29.5	52.7	2.7	6.4	9.1	17.0	11.7	4.5
Coconino	145	13	22	38	70	2	100.0	9.0	15.2	262	48.3	1.4	7.4	21.0	8.3	7.0	6.5
Gila	48	3	8	14	23	0	100.0	6.3	16.7	29.2	47.9	-	6.4	18.8	11.1	6.6	5.2
Graham	20	0	2	7	11	0	100.0	-	10.0	35.0	55.0	-	4.7	-	7.1	7.4	3.8
Greenlee	5	0	1	4	0	0	100.0	-	20.0	80.0	-	-	4.8	-	11.1	12.1	-
La Paz	12	2	4	3	3	0	100.0	16.7	33.3	25.0	25.0	-	7.4	28.6	16.0	5.9	3.8
Maricopa	2,615	161	320	533	1,500	101	100.0	6.2	12.2	20.4	57.4	3.9	6.5	15.3	14.0	8.8	5.0
Mohave	99	7	15	30	42	5	100.0	7.1	15.2	30.3	42.4	5.1	6.7	16.3	7.7	6.7	5.4
Navajo	151	12	33	35	62	9	100.0	7.9	21.9	23.2	41.1	6.0	7.7	20.0	11.7	6.6	6.0
Pima	717	33	88	190	403	3	100.0	4.6	12.3	26.5	56.2	0.4	6.3	10.4	10.4	8.0	5.1
Pinal	145	8	19	43	71	4	100.0	5.5	13.1	29.7	49.0	2.8	6.8	15.4	7.7	9.1	5.7
Santa Cruz	59	4	9	16	30	0	100.0	6.8	15.3	27.1	50.8	-	7.5	12.1	10.0	9.2	6.2
Yavapai	83	1	12	28	42	0	100.0	1.2	14.5	33.7	50.6	-	6.8	6.7	12.8	11.2	4.9
Yuma	123	10	15	39	54	5	100.0	8.1	12.2	31.7	43.9	4.1	5.0	7.9	7.5	6.7	3.8

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[1] Low-birthweight babies as a percent of all live birth in specific category.

[2] The share of LBW births by amount of prenatal visits.

[3] Number of LBW births per 100 births in specified prenatal visits group. See Table 6-26.

TABLE 6-20

LOW-BIRTHWEIGHT BIRTHS AND BIRTH RATIOS OF LBW BABIES BY GESTATIONAL AGE, NUMBER OF PRENATAL VISITS AND MOTHER'S ETHNIC GROUP, ARIZONA, 1990

Ethnic group and number of prenatal visits:	ALL LIVE BIRTHS			LOW-BIRTHWEIGHT BIRTHS			BIRTH RATIOS OF LBW BABIES		
		Gestational age:			Gestational age:			Gestational age:	
	Total	≤ 37 weeks	>37 weeks	Total	≤ 37 weeks	>37 weeks	Total	≤ 37 weeks	>37 weeks
ALL ETHNIC GROUPS[1]	68,814	9,184	59,630	4,451	3,286	1,165	6.5	35.8	2.0
<5 prenatal visits	6,780	1,468	4,924	845	666	155	12.5	45.4	3.1
>5 prenatal visits	60,643	7,495	52,890	3,471	2,525	923	5.7	33.7	1.7
WHITE[2]	39,733	5,286	34,339	2,472	1,848	599	6.2	35.0	1.7
<5 prenatal visits	1,997	520	1,450	335	272	53	16.8	52.3	3.7
>5 prenatal visits	37,269	4,664	32,536	2,076	1,533	533	5.6	32.9	1.6
HISPANIC[3]	19,321	2,460	16,743	1,237	875	347	6.4	35.6	2.1
<5 prenatal visits	3,146	587	2,519	303	237	63	9.6	40.4	2.5
>5 prenatal visits	15,511	1,788	13,654	885	605	270	5.7	33.8	2.0
BLACK	2,562	478	2,068	295	226	63	11.5	47.3	3.0
<5 prenatal visits	421	112	303	82	64	14	19.5	57.1	4.6
>5 prenatal visits	2,050	351	1,689	201	152	47	9.8	43.3	2.8
NATIVE AMERICAN	6,231	814	5,383	378	282	87	6.1	34.6	1.6
<5 prenatal visits	1,166	237	914	121	90	24	10.4	38.0	2.6
>5 prenatal visits	4,934	561	4,355	245	184	60	5.0	32.8	1.4

[1] Includes ethnic groups other than white, Hispanic, Black and Native American.
[2] Non-Hispanic.
[3] White of Hispanic origin.

Note: Unknowns for the number of prenatal visits and/or gestational age are included in total births.

TABLE 6-21

BIRTHS BY GESTATIONAL AGE AND BIRTHWEIGHT BY MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	Total:[1]		≤ 37 Weeks of Gestation			>37 Weeks of Gestation		
County	All weights	<2,500g	Total	<2,500g	>2,500g	Total	<2,500g	>2,500g
ARIZONA	68,814	4,451	9,814	3,286	5,898	59,630	1,165	58,465
Apache	1,800	117	260	93	167	1,540	24	1,516
Cochise	1,738	112	169	66	103	1,569	46	1,523
Coconino	1,965	145	280	103	177	1,685	42	1,643
Gila	749	48	96	31	65	653	17	636
Graham	424	20	48	16	32	376	4	372
Greenlee	105	5	7	4	3	98	1	97
La Paz	162	12	36	7	29	126	5	121
Maricopa	40,414	2,615	5,564	1,978	3,586	34,850	637	34,213
Mohave	1,488	99	253	71	182	1,235	28	1,207
Navajo	1,972	151	281	115	166	1,691	36	1,655
Pima	11,412	717	1,510	536	974	9,902	181	9,721
Pinal	2,133	145	254	97	157	1,879	48	1,831
Santa Cruz	784	59	98	42	56	686	17	669
Yavapai	1,220	83	151	57	94	1,069	26	1,043
Yuma	2,448	123	177	70	107	2,271	53	2,218

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[1] Includes records with unspecified birthweight and/or gestational age.

TABLE 6-22

NEWBORNS ADMITTED TO NEWBORN INTENSIVE CARE UNITS BY GESTATIONAL AGE, BIRTHWEIGHT AND MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	Total Admitted:[1]		≤ 37 Weeks of Gestation			>37 Weeks of Gestation		
County	All weights	<2,500g	Total	<2,500g	>2,500g	Total	<2,500g	>2,500g
ARIZONA	2,727	1,483	1,805	1,392	413	922	91	831
Apache	48	34	37	33	4	11	1	10
Cochise	65	38	38	35	3	27	3	24
Coconino	74	38	46	33	13	28	5	23
Gila	33	15	20	14	6	13	1	12
Graham	9	6	8	6	2	1	0	1
Greenlee	3	2	2	2	0	1	0	1
La Paz	13	5	8	5	3	5	0	5
Maricopa	1,664	898	1,112	848	264	552	50	502
Mohave	48	29	34	23	11	14	6	8
Navajo	66	41	47	36	11	19	5	14
Pima	517	263	318	248	70	199	15	184
Pinal	67	35	44	34	10	23	1	22
Santa Cruz	23	15	18	15	3	5	0	5
Yavapai	37	21	26	19	7	11	2	9
Yuma	60	43	47	41	6	13	2	11

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[1] Includes records with unspecified birthweight and/or gestational age.

TABLE 6-23

SINGLE AND PLURAL RESIDENT LIVE BIRTHS BY BIRTHWEIGHT, ARIZONA, 1980-1990

Birthweight in grams[1]	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Under 1000, total	222	213	203	217	244	289	313	360	332	365	485
Single	181	178	169	165	206	235	255	273	260	318	414
Plural	51	35	34	52	38	54	58	87	72	47	66
1001-1500, total	232	256	223	297	283	323	368	374	346	318	391
Single	181	211	189	231	225	253	303	291	275	254	312
Plural	51	45	34	66	58	70	65	83	71	64	76
1501-2000, total	588	579	605	617	603	692	6478	700	736	794	815
Single	461	445	501	480	482	556	514	545	568	591	604
Plural	127	134	104	137	121	136	134	155	168	203	206
2001-2500, total	2,047	2,055	2,045	2,073	2,247	2,408	2,456	2,673	2,696	2,802	2,760
Single	1,804	1,799	1,804	1,804	1,980	2,084	2,089	2,279	2,296	2,411	2,272
Plural	243	256	241	269	267	324	367	394	400	391	457
2501-4000, total	41,954	43,820	44,328	44,385	46,155	49,720	51,033	52,784	54,948	56,133	57,471
Single	11,501	42,847	43,891	43,872	45,663	49,241	50,476	52,181	54,332	55,476	55,976
Plural	453	473	437	513	492	479	557	603	616	657	755
4001 and over, total	4,945	5,156	5,188	5,279	5,538	5,863	5,958	6,396	6,433	6,646	6,837
Single	4,951	5,155	5,188	5,275	5,536	5,861	5,956	6,391	6,428	6,662	6,757
Plural	3	1	-	4	2	2	2	5	5	4	3
All weights, total	50,049	51,620	52,628	52,919	55,109	59,344	60,822	63,320	65,544	67,128	68,814
Single	49,113	50,670	51,777	51,878	54,131	58,775	59,637	61,989	64,209	65,762	66,383
Plural	936	950	851	1,041	978	1,069	1,185	1,331	1,335	1,366	1,568

[1] Totals for each group include records with unknown plurality of birth. Beginning in 1990, the value ranges are as follows: Under 1,000, 1000-1499, 1500-1999, 2000-2499, 2500-3999, 4000 and over.

TABLE 6-24

BIRTHS BY TRIMESTER OF PREGNANCY PRENATAL CARE BEGAN AND MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

		Prenatal Care				
County	Total	No Care	1st Trimester	2nd Trimester	3rd Trimester	Unknown
ARIZONA	68,814	1,879	45,533	15,064	4,984	1,354
Apache	1,800	56	947	605	185	7
Cochise	1,738	22	1,193	399	108	16
Coconino	1,965	62	1,005	668	222	8
Gila	749	16	475	197	57	4
Graham	424	4	259	119	36	6
Greenlee	105	2	64	27	11	1
La Paz	162	7	77	48	25	5
Maricopa	40,414	1,060	29,109	7,233	2,052	960
Mohave	1,488	43	758	409	204	74
Navajo	1,972	61	1,011	651	213	36
Pima	11,412	317	7,293	2,747	1,012	43
Pinal	2,133	53	1,176	606	213	85
Santa Cruz	784	33	360	262	129	0
Yavapai	1,220	14	797	293	112	4
Yuma	2,448	129	1,009	800	405	105

TABLE 6-25

BIRTHS BY MOTHER'S AGE GROUP, ETHNICITY AND TRIMESTER OF PREGNANCY PRENATAL CARE BEGAN, ARIZONA, 1990

Trimester of pregnancy prenatal care began by ethnic group	ALL AGES	UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40+
ALL ETHNIC GROUPS	68,814	188	3,423	6,156	19,316	20,848	13,299	4,777	790
1st trimester	45,533	70	1,471	2,938	11,510	15,146	10,236	3,631	525
2nd trimester	15,064	74	1,236	2,083	4,909	3,750	2,084	756	171
3rd trimester	4,954	32	424	701	1,809	1,142	585	231	58
No prenatal care	1,879	8	185	269	623	448	231	91	23
Not stated	1,354	4	107	165	465	362	163	68	17
WHITE[2]	39,733	44	1,230	2,842	10,117	12,972	8,918	3,144	457
1st trimester	30,556	19	608	1,538	7,106	10,672	7,612	2,645	352
2nd trimester	6,613	21	433	955	2,121	1,676	973	361	72
3rd trimester	1,675	3	126	237	597	385	216	88	21
No prenatal care	470	1	33	73	146	114	64	31	7
Not stated	419	0	30	39	147	125	53	19	5
HISPANIC[3]	19,321	88	1,554	2,299	6,319	5,180	2,711	969	197
1st trimester	9,835	30	606	944	3,008	2,964	1,605	571	105
2nd trimester	5,506	31	561	775	1,877	1,310	678	228	46
3rd trimester	2,293	17	217	331	852	523	242	85	26
No prenatal care	1,012	6	117	155	347	218	112	46	11
Not stated	675	4	53	94	235	165	74	39	9
BLACK	2,562	23	235	304	808	696	375	110	11
1st trimester	1,528	12	106	153	475	444	254	77	7
2nd trimester	603	8	80	90	184	145	70	23	3
3rd trimester	197	2	24	29	71	41	25	5	0
No prenatal care	124	1	11	15	40	36	18	3	0
Not stated	110	0	14	17	38	30	8	2	1
NATIVE AMERICAN	6,231	32	388	681	1,893	1,679	1,007	445	106
1st trimester	2,888	9	143	293	818	806	530	250	39
2nd trimester	2,188	13	156	247	685	581	329	127	50
3rd trimester	779	10	56	101	269	184	97	52	10
No prenatal care	258	0	24	26	85	74	33	11	5
Not stated	118	0	9	14	36	34	18	5	2
OTHER RACE	967	1	16	30	179	321	288	109	23
1st trimester	726	0	8	10	103	260	235	88	22
2nd trimester	154	1	6	16	42	38	34	17	0
3rd trimester	40	0	1	3	20	9	5	1	1
No prenatal care	15	0	0	0	5	6	4	0	0
Not stated	32	0	1	1	9	8	10	3	0

[1] Includes records with unknown or unspecified race.
[2] Non-Hispanic.
[3] White of Hispanic origin.

TABLE 6-26

BIRTHS BY AMOUNT OF PRENATAL VISITS AND COUNTY OF RESIDENCE, ARIZONA, 1990

County	Total	No Visits	1-4 Visits	5-8 Visits	9+ Visits	Unknown
ARIZONA	68,814	1,871	4,909	12,591	48,052	1,391
Apache	1,800	57	182	510	1,034	17
Cochise	1,738	22	88	283	1,305	40
Coconino	1,965	62	266	543	1,085	9
Gila	749	16	72	213	442	6
Graham	424	5	28	94	292	5
Greenlee	105	2	9	33	61	0
La Paz	162	7	25	51	79	0
Maricopa	40,414	1,052	2,289	6,034	30,070	969
Mohave	1,488	43	194	447	780	24
Navajo	1,972	60	281	534	1,031	66
Pima	11,412	318	844	2,374	7,847	29
Pinal	2,133	52	248	470	1,246	117
Santa Cruz	784	33	90	174	486	1
Yavapai	1,220	15	94	249	858	4
Yuma	2,448	127	199	582	1,436	104

TABLE 6-27

BIRTHS BY MOTHER'S AGE GROUP, ETHNICITY AND NUMBER OF PRENATAL VISITS, ARIZONA, 1990

Number of prenatal visits by ethnic group:	ALL AGES	UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40+
ALL ETHNIC GROUPS[1]	68,814	188	3,423	6,156	19,316	20,848	13,299	4,777	794
None	1,871	8	188	268	617	445	232	89	24
1-4	4,909	39	406	700	1,736	1,140	585	236	67
5-8	12,591	55	891	1,514	4,030	3,300	1,952	705	144
9+	48,052	83	1,831	3,498	12,466	15,599	10,355	3,671	549
WHITE[2]	39,733	44	1,230	2,842	10,117	12,972	8,918	3,144	457
None	463	1	33	73	142	112	65	29	7
1-4	1,534	6	105	222	540	359	189	89	21
5-8	5,564	11	287	635	1,678	1,529	978	373	72
9+	31,705	25	768	1,858	7,606	10,842	7,620	2,633	350
HISPANIC[3]	19,321	88	1,554	2,299	6,319	5,180	2,711	969	194
None	1,012	6	119	154	346	218	112	46	11
1-4	2,134	21	202	305	776	476	246	88	20
5-8	4,523	28	409	605	1,563	1,126	564	187	40
9+	10,988	32	776	1,142	3,401	3,196	1,717	605	117
BLACK	2,562	23	235	304	808	696	375	110	11
None	123	1	11	15	39	36	18	3	0
1-4	298	5	33	45	94	78	35	7	1
5-8	533	4	64	63	170	133	79	20	0
9+	1,517	13	115	169	470	426	237	78	9
NATIVE AMERICAN	6,231	32	388	681	1,893	1,679	1,007	445	106
None	258	0	25	26	85	73	33	11	5
1-4	908	7	64	123	312	219	111	51	21
5-8	1,827	12	128	203	577	471	293	113	30
9+	3,107	12	161	313	881	877	553	263	47
OTHER RACE	967	1	16	30	179	321	288	109	22
None	15	0	0	0	5	6	4	0	0
1-4	35	0	2	5	14	8	4	1	1
5-8	144	0	3	8	42	41	38	12	0
9+	735	1	11	16	108	258	228	92	21

[1] Includes records with unknown or unspecified race. Totals for each race include records with unspecified number of prenatal visits.

[2] Non-Hispanic

[3] White of Hispanic origin.

TABLE 6-28

BIRTHS BY MOTHER'S AGE GROUP, ETHNICITY AND PAYING PARTY FOR THE DELIVERY, ARIZONA, 1990

PAYEE FOR THE DELIVERY BY MOTHER'S ETHNIC GROUP:	ALL AGES	UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40+
ALL ETHNIC GROUPS[1]	68,814	188	3,423	6,156	19,316	20,848	13,299	4,777	790
AHCCCS[2]	21,491	109	1,932	3,562	7,818	4,825	2,272	798	170
IHS[3]	3,590	18	206	389	1,093	1,012	574	253	45
PRIVATE INSURANCE	32,797	33	686	1,229	7,035	11,827	8,520	3,024	438
SELF	8,280	25	461	735	2,588	2,428	1,429	521	89
UNKNOWN	2,656	3	138	241	782	756	504	181	48
WHITE[4]	39,733	44	1,230	2,842	10,117	12,972	8,918	3,144	457
AHCCCS	8,895	27	630	1,604	3,401	2,002	881	295	53
IHS	120	0	4	16	24	41	24	9	2
PRIVATE INSURANCE	24,903	12	382	782	5,015	9,160	6,834	2,392	323
SELF	4,547	5	161	346	1,342	1,386	901	346	58
UNKNOWN	1,268	0	53	94	335	383	278	102	21
HISPANIC[5]	19,321	88	1,554	2,299	6,319	5,180	2,711	969	194
AHCCCS	9,508	52	1,014	1,504	3,377	2,093	1,001	378	86
IHS	64	0	3	10	17	15	13	6	0
PRIVATE INSURANCE	5,836	16	233	360	1,597	1,971	1,160	422	75
SELF	3,229	19	256	345	1,093	911	440	137	26
UNKNOWN	684	1	48	80	235	190	97	26	7
BLACK	2,562	23	235	304	808	696	375	110	11
AHCCCS	1,390	18	157	223	487	328	149	23	5
IHS	5	0	0	1	0	1	3	0	0
PRIVATE INSURANCE	874	3	45	50	214	295	192	70	5
SELF	231	1	28	24	84	52	27	14	1
UNKNOWN	62	1	5	6	23	20	4	3	0
NATIVE AMERICAN	6,231	32	388	681	1,893	1,679	1,007	445	106
AHCCCS	1,586	12	122	220	512	381	223	91	25
IHS	3,398	18	199	362	1,051	954	533	238	43
PRIVATE INSURANCE	483	1	21	23	104	148	112	59	15
SELF	164	0	15	17	48	40	31	10	3
UNKNOWN	600	1	31	59	178	156	108	47	19
OTHER RACE	967	1	16	30	179	321	288	109	22
AHCCCS	112	0	9	11	41	21	18	11	1
IHS	3	0	0	0	1	1	1	0	0
PRIVATE INSURANCE	701	1	5	14	105	253	222	81	20
SELF	109	0	1	3	21	39	30	14	1
UNKNOWN	42	0	1	2	11	7	17	3	0

[1] Includes records with unknown or unspecified race. Totals for each race include records with unspecified paying party for delivery.

[2] The Arizona Health Care Cost Containment System is the state's alternative to Medicaid.

[3] Indian Health Services.

[4] Non-Hispanic.

[5] White of Hispanic origin.

TABLE 6-29

BIRTHS BY MOTHER'S AGE GROUP, ETHNICITY AND NUMBER OF PREVIOUS LIVE BIRTHS, ARIZONA, 1990

Number of previous live births by ethnic group:	ALL AGES	UNDER 15	15-17	18-19	20-24	25-29	30-34	35-39	40+
ALL ETHNIC GROUPS[1]	68,814	188	3,423	6,156	19,316	20,848	13,299	4,777	790
None	25,985	176	2,921	4,216	8,400	6,306	2,990	859	112
1	20,915	10	454	1,544	6,566	6,823	4,124	1,261	129
2	11,933	2	37	329	2,953	4,457	3,013	988	153
3	5,531	0	4	49	1,034	2,044	1,615	676	108
4 or more	4,376	0	0	11	342	1,198	1,543	989	288
WHITE[2]	39,733	44	1,230	2,842	10,117	12,972	8,918	3,144	457
None	16,206	42	1,121	2,133	5,001	4,700	2,399	720	89
1	12,924	2	102	603	3,466	4,531	3,127	993	98
2	6,352	0	1	92	1,243	2,392	1,900	628	96
3	2,510	0	1	9	315	923	850	356	55
4 or more	1,705	0	0	1	84	418	634	445	119
HISPANIC[3]	19,321	88	1,554	2,299	6,319	5,180	2,711	969	194
None	6,943	80	1,302	1,494	2,490	1,116	370	77	10
1	5,335	6	225	622	2,104	1,546	638	170	22
2	3,657	2	23	149	1,091	1,401	724	230	36
3	1,883	0	2	26	464	684	484	188	35
4 or more	1,479	0	0	6	160	425	494	303	91
BLACK	2,562	23	235	304	808	696	375	110	11
None	854	22	175	163	267	143	59	21	4
1	765	1	56	94	255	229	102	26	2
2	480	0	4	34	172	153	96	20	1
3	249	0	0	11	73	93	54	16	2
4 or more	210	0	0	1	41	76	63	27	2
NATIVE AMERICAN	6,231	32	388	681	1,893	1,679	1,007	445	106
None	1,569	31	309	401	557	185	68	21	3
1	1,549	1	69	222	677	398	145	33	3
2	1,312	0	9	52	431	483	239	84	14
3	841	0	1	3	177	337	210	101	12
4 or more	955	0	0	3	56	274	344	205	71
OTHER RACE	967	1	16	30	179	321	288	109	22
None	413	1	14	25	91	162	94	20	6
1	342	0	2	3	64	119	112	39	3
2	132	0	0	2	16	28	54	26	6
3	48	0	0	0	5	7	17	15	4
4 or more	27	0	0	0	1	5	8	9	3

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[1] Includes records with unknown or unspecified race. Totals for each race include records with unspecified number of prenatal visits.

[2] Non-Hispanic.

[3] White of Hispanic origin.

TABLE 6-30

AVERAGE NUMBER[1] OF PRENATAL VISITS DURING PREGNANCY ACCORDING TO SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY COUNTY OF RESIDENCE, ARIZONA, 1990

County of Residence	ALL BIRTHS	MARITAL STATUS: WED	UNWED	PAYEE FOR THE DELIVERY: AHCCCS[2]	IHS[3]	PRIVATE INSURANCE	SELF	UNKNOWN	MOTHERS' ETHNIC GROUP: WHITE[4]	HISPANIC[5]	BLACK	NATIVE AMERICAN	LENGTH OF GESTATION: <38 WEEKS	>38 WEEKS	LBW NEWBORN: YES	NO	NEWBORN ADMITTED TO INTENSIVE CARE UNIT: YES	NO
ARIZONA	10.8	11.4	9.5	9.4	8.9	12.0	10.6	9.5	11.6	9.7	10.1	9.0	10.4	10.9	10.1	10.9	10.6	10.8
Apache	9.7	10.3	9.1	8.9	10.0	10.8	8.6	8.8	10.4	9.2	-	9.6	8.8	9.8	8.9	9.7	8.0	9.9
Cochise	10.8	11.2	9.6	9.9	7.5	11.4	11.0	10.7	11.3	9.9	11.9	9.6	9.8	10.9	9.1	10.9	10.4	10.8
Coconino	9.5	10.4	8.0	9.1	7.6	11.8	11.1	7.6	11.4	9.6	9.4	7.7	9.6	9.5	9.8	9.4	9.7	9.5
Gila	9.4	9.9	8.6	8.8	8.3	11.3	9.8	11.8	10.3	8.9	8.4	8.2	9.3	9.4	8.8	9.4	10.6	9.3
Graham	10.2	10.6	9.3	10.0	8.7	10.8	10.0	8.0	10.7	10.2	9.5	8.2	9.7	10.2	9.4	10.2	9.6	10.2
Greenlee	9.5	9.9	8.8	9.0	-	10.3	9.2	6.6	8.9	9.9	-	10.5	7.4	9.6	5.6	9.7	6.7	9.7
La Paz	8.5	9.5	7.4	7.1	7.5	10.5	9.9	8.0	9.2	7.8	-	8.0	8.1	8.9	6.2	8.7	7.3	8.8
Maricopa	11.2	11.9	9.7	9.4	8.2	10.4	10.8	10.6	12.0	9.6	10.0	8.9	11.0	11.3	10.6	11.3	11.0	11.3
Mohave	9.1	9.2	8.7	8.4	8.4	10.1	9.1	8.1	9.2	8.1	9.7	7.8	9.1	9.1	8.9	9.1	7.9	9.3
Navajo	9.0	9.5	8.4	8.8	8.6	10.7	9.4	9.0	9.9	8.6	7.2	8.7	8.0	9.2	8.6	9.0	8.3	9.0
Pima	10.8	11.2	10.0	10.0	10.8	11.6	10.0	9.4	11.3	10.1	10.5	10.7	10.2	10.9	9.8	10.9	11.0	10.8
Pinal	9.8	10.5	8.9	9.0	9.3	11.3	9.0	10.7	10.8	8.8	8.4	9.7	10.0	9.8	9.6	9.8	10.5	9.8
Santa Cruz	10.1	10.3	9.5	9.8	-	10.6	10.2	7.8	10.7	10.0	4.0	9.0	9.0	10.2	9.4	10.1	8.9	10.1
Yavapai	10.0	10.5	8.7	8.8	10.6	11.3	10.6	10.4	10.3	8.6	5.7	8.0	8.9	10.2	8.3	10.2	8.6	10.1
Yuma	10.3	10.9	8.4	8.5	10.5	11.5	10.4	8.3	11.6	9.4	10.6	9.1	9.8	10.3	9.4	10.3	8.2	10.3

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[1] The arithmetic mean value for the number of prenatal visits in specified group. Excluded are cases with no prenatal care and/or unspecified number of prenatal visits.

[2] The Arizona Health Care Cost Containment System is the state's alternative to Medicaid.

[3] Indian Health Services.

[4] Non-Hispanic.

[5] White of Hispanic origin.

TABLE 6-31

NUMBER OF BIRTHS TO UNWED MOTHERS AND BIRTH RATIOS[1] BY ETHNICITY
ARIZONA, 1980-1990

	All Live Births						Live Births to Unwed Mothers						Ratios of Birth to Unwed Mothers					
Year	All Ethnic Groups	White[2]	Hispanic[3]	Black	Native American	Other Race	All Ethnic Groups	White	Hispanic	Black	Native American	Other Race	All Ethnic Groups	White	Hispanic	Black	Native American	Other Race
1980	50,049	31,597	11,495	1,634	4,796	527	9,373	3,233	2,983	832	2,213	21	18.7	10.2	26.0	50.9	46.1	4.0
1981	51,620	32,495	11,896	1,759	4,878	592	10,009	3,603	3,183	1,071	2,374	41	19.4	11.1	26.8	60.9	47.6	6.9
1982	52,628	33,419	11,630	1,800	5,137	642	10,798	3,985	3,349	940	2,489	32	20.5	11.9	28.8	52.2	48.5	5.0
1983	52,919	33,664	11,477	1,820	5,297	661	11,704	4,290	3,708	954	2,711	40	22.1	12.7	32.3	52.4	51.2	6.1
1984	55,109	35,183	12,067	1,911	5,265	683	12,832	4,837	4,162	1,048	2,736	49	23.3	13.7	34.5	54.8	52.0	7.2
1985	59,344	37,972	13,062	1,969	5,478	863	14,158	5,639	4,533	1,080	2,842	64	23.9	14.9	34.7	54.9	51.9	7.4
1986	60,822	38,044	14,044	2,157	5,718	859	15,600	6,060	5,108	1,186	3,158	88	25.6	15.9	36.4	55.0	55.2	10.2
1987	63,320	39,616	14,402	2,289	6,036	977	17,161	6,794	5,575	1,307	3,389	96	27.1	17.1	38.7	57.1	56.1	9.8
1988	65,544	39,821	15,952	2,406	6,240	1,052	18,716	7,339	6,286	1,392	3,561	138	28.6	18.4	39.4	57.9	57.1	13.1
1989	67,128	39,484	17,663	2,528	6,338	1,106	20,612	7,935	7,326	1,550	3,665	136	30.7	20.1	41.5	61.3	57.8	12.3
1990	68,814	39,733	19,321	2,562	6,231	967	22,436	8,336	8,704	1,569	3,732	95	32.6	21.0	45.0	61.2	59.9	9.8

[1] Ratio per 100 births in specific group.
[2] Non-Hispanic.
[3] White of Hispanic origin.

TABLE 6-32

BIRTHS TO UNWED MOTHERS BY MOTHER'S COUNTY OF RESIDENCE AND AGE GROUP ARIZONA, 1990

County of Residence	ALL AGES Number	ALL AGES Ratio[1]	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40 +
ARIZONA	22,436	-	179	2,882	3,969	7,624	4,586	2,204	834	153
Ratio	-	32.6	95.2	84.2	64.5	39.5	22.0	16.6	17.5	19.3
Apache	949	52.7	4	72	136	314	220	141	51	11
Cochise	458	26.4	6	74	88	153	72	42	18	5
Coconino	791	40.3	5	71	134	294	166	80	36	5
Gila	299	39.9	3	47	63	87	48	26	20	5
Graham	138	32.5	1	20	24	56	18	13	5	1
Greenlee	38	36.2	0	9	6	10	9	1	3	0
La Paz	56	34.6	0	6	12	19	8	8	2	1
Maricopa	12,541	31.0	113	1,674	2,233	4,310	2,553	1,170	421	62
Mohave	431	29.0	4	57	71	143	102	40	18	2
Navajo	884	44.8	7	94	152	299	209	81	33	9
Pima	3,714	33.1	25	458	640	1,287	748	388	138	30
Pinal	953	44.7	10	166	218	270	161	86	35	7
Santa Cruz	222	28.3	0	27	43	69	43	24	14	2
Yavapai	300	24.6	0	29	54	94	71	32	14	5
Yuma	662	27.0	1	84	95	219	158	72	26	7

[1] Number of births to unmarried women per 100 live births in specified group.

TABLE 6-33

BIRTHS TO UNWED MOTHERS BY MOTHER'S COUNTY OF RESIDENCE, ETHNICITY AND EDUCATION
ARIZONA, 1990

	ETHNIC GROUP						EDUCATION (Years of school completed)						
County of Residence	Total	White[1]	Hispanic[2]	Black	Native American	Other	<8	8	9-11	12	13-16	17+	Unknown
ARIZONA	22,436	8,336	8,704	1,569	3,732	95	1,529	1,339	7,843	7,797	3,032	118	778
Ratio[3]	32.6	21.0	45.0	61.2	59.9	9.8	44.4	59.0	57.2	32.1	14.5	4.1	57.7
Apache	949	23	16	0	910	0	20	29	261	429	151	7	52
Cochise	458	160	260	25	2	11	33	27	146	136	67	1	48
Coconino	791	155	76	18	542	0	25	21	263	358	114	4	6
Gila	299	119	57	3	120	0	5	12	126	121	31	1	3
Graham	138	49	52	3	34	0	1	8	53	59	16	1	0
Greenlee	38	10	27	0	1	0	1	2	15	19	1	0	0
La Paz	56	22	21	0	13	0	4	5	17	21	7	0	2
Maricopa	12,541	5,287	5,209	1,231	749	65	1,022	817	4,353	4,104	1,679	55	511
Mohave	431	367	37	2	25	0	6	21	157	183	46	0	18
Navajo	884	105	42	5	731	1	26	48	296	351	119	1	43
Pima	3,714	1,373	1,790	185	352	14	218	190	1,370	1,307	568	39	22
Pinal	953	293	376	74	209	1	44	67	345	331	96	0	70
Santa Cruz	222	7	215	0	0	0	28	13	100	62	18	1	0
Yavapai	300	230	45	2	23	0	8	15	98	113	61	4	1
Yuma	662	136	481	21	21	3	88	64	243	203	58	4	2

[1] Non-Hispanic.
[2] White of Hispanic origin.
[3] Number of births to unmarried women per 100 live births in specified group.

TABLE 6-34

NUMBER OF BIRTHS AND RATIOS[1] OF BIRTH TO UNWED MOTHERS BY AGE GROUP AND ETHNICITY, ARIZONA, 1990

	NUMBER OF BIRTHS TO UNWED MOTHERS						RATIOS OF BIRTHS TO UNWED MOTHERS					
Mother's Age Group	Non-Hispanic White	Hispanic	Black	Native American	Other	Total	Non-Hispanic White	Hispanic	Black	Native American	Other	Total
Under 15	42	81	23	32	1	179	95.5	92.0	100.0	100.0	100.0	95.2
15-19	2,941	2,898	494	944	24	6,851	72.2	75.2	91.7	88.3	52.2	71.5
20-24	2,804	3,006	527	1,255	32	7,624	27.7	47.6	65.2	66.3	17.9	39.5
25-29	1,758	1,618	344	848	18	4,586	13.6	31.2	49.4	50.5	5.6	22.0
30-34	858	756	138	439	13	2,204	8.7	27.9	36.8	43.6	4.5	16.6
35-39	330	285	41	174	4	834	10.5	29.4	37.3	39.1	3.7	17.5
40+	51	59	2	40	3	153	11.2	29.9	18.2	37.7	13.0	19.3
ALL AGES[2]	8,336	8,704	1,569	3,732	95	22,436	21.0	45.0	61.2	59.9	9.8	32.6

[1] Births to unwed mothers per 100 births in specified group.
[2] Includes records with unspecified age and/or ethnic group.

TABLE 6-35

NUMBER OF LOW BIRTHWEIGHT BIRTHS BY MOTHER'S MARITAL STATUS[1], AGE GROUP AND ETHNIC GROUP, ARIZONA, 1990

	MARRIED						UNMARRIED					
Mother's Age Group	Non-Hispanic White	Hispanic	Black	Native American	Other	Total	Non-Hispanic White	Hispanic	Black	Native American	Other	Total
Under 15	0	0	0	0	0	0	8	9	1	1	1	20
15-17	24	17	1	1	0	43	95	120	35	19	0	269
18-19	98	57	5	4	1	165	121	121	29	37	0	308
20-24	384	168	19	36	17	624	214	206	52	69	2	543
25-29	546	172	33	36	21	808	156	99	52	49	0	356
30-34	460	101	25	40	15	641	101	63	29	40	1	234
35-39	183	44	7	22	7	263	35	36	7	15	0	93
40+	36	14	0	6	2	58	4	9	0	2	1	16
Total	1,731	573	90	145	63	2,602	734	664	205	232	5	1,840

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[1] Excludes records with unspecified marital status.

TABLE 6-36

BIRTH RATIOS[1] OF LOW BIRTHWEIGHT BABIES BY MOTHER'S MARITAL STATUS, AGE GROUP AND ETHNIC GROUP, ARIZONA, 1990

	MARRIED					UNMARRIED				
Mother's Age Group	Non-Hispanic White	Hispanic	Black	Native American	Total	Non-Hispanic White	Hispanic	Black	Native American	Total
Under 15	-	-	-	-	-	19.0	11.1	4.3	3.1	11.2
15-17	9.0	7.3	16.7	4.0	8.1	9.9	9.1	15.3	5.3	9.3
18-19	7.5	7.9	12.8	4.1	7.6	7.9	7.7	10.9	6.3	7.8
20-24	5.3	5.1	6.8	5.7	5.4	7.6	6.9	9.9	5.5	7.1
25-29	4.9	4.8	9.4	4.4	5.0	8.9	6.1	15.1	5.8	7.8
30-34	5.7	5.2	10.5	7.1	5.8	11.8	8.3	21.0	9.1	10.6
35-39	6.5	6.4	10.1	8.1	6.7	10.6	12.6	17.1	8.6	11.2
40+	8.9	10.1	-	9.1	9.1	7.8	15.3	-	5.0	10.5
Total	5.5	5.4	9.1	2.3	5.6	8.8	7.6	13.1	6.2	8.2

[1] Number of low birthweight births per 100 live births in specified group.

TABLE 6-37

LIVE BIRTHS BY MOTHER'S AGE AND FATHER'S AGE, ARIZONA, 1990

	Mother's Age										
Father's Age:	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Unknown	Total
<15	2	5	2	0	1	0	0	0	0	0	10
15-17	11	194	97	32	4	1	0	0	0	0	339
18-19	10	431	665	395	36	5	2	0	0	0	1,544
20-24	9	504	1,860	6,171	1,204	246	35	5	0	2	10,036
25-29	4	91	484	5,392	8,689	1,712	283	30	0	4	16,689
30-34	0	25	106	1,348	5,670	5,778	895	81	2	2	13,907
35-39	0	5	24	325	1,424	2,927	1,818	130	2	0	6,655
40-44	0	2	4	118	386	808	836	250	6	1	2,411
45+	0	0	3	34	116	217	218	103	5	1	697
Unknown	152	2,166	2,911	5,501	3,318	1,605	690	168	8	7	16,526
Total	188	3,423	6,156	19,316	20,848	13,299	4,777	767	23	17	68,814

TABLE 6-38

LIVE BIRTHS BY MOTHER'S ETHNIC GROUP AND FATHER'S ETHNIC GROUP, ARIZONA, 1990

Father's Ethnic Group	Mother's Ethnic Group: White[1]	Hispanic	Black	Native American	Other	Total
White[2]	30,322	1,936	79	240	307	32,884
Hispanic	2,414	10,905	42	274	37	13,672
Black	350	171	1,076	48	24	1,669
Native American	203	102	2	3,378	3	3,688
Other	6,444	6,207	1,363	2,291	596	16,901
Total	39,733	19,321	2,562	6,231	967	68,814

[1,2] Not of Hispanic origin.

TABLE 6-39

LIVE BIRTHS BY MOTHER'S AND FATHER'S EDUCATION, ARIZONA, 1990

Years of School Completed by Father	Years of School Completed by Mother: <8	8	9-11	12	13-16	17+	Unknown	Total
<8	1,418	280	526	391	84	1	58	2,678
8	154	217	306	252	67	3	12	1,011
9-11	315	315	2,868	2,212	595	15	59	6,379
12	318	301	3,066	10,692	3,890	206	94	18,567
13-16	85	84	798	4,648	11,665	1,021	58	18,359
17+	13	12	41	497	2,534	1,581	9	4,687
Unknown	1,143	1,142	6,103	5,569	2,042	75	1,059	17,133
Total	3,446	2,271	13,708	24,261	20,877	2,902	1,349	68,814

TABLE 6-40

BIRTHS WITH CONGENITAL ANOMALIES MENTIONED ON BIRTH CERTIFICATE BY COUNTY OF RESIDENCE, ARIZONA, 1990

Congenital Anomalies	Total	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Anencephalus	9	0	0	0	0	0	0	0	6	0	0	2	0	0	1	0
Spina Bifida/Meningocele	10	1	0	0	1	0	0	0	7	0	0	0	0	0	0	1
Hydrocephalus	16	0	2	0	0	0	0	0	8	0	1	2	1	0	0	2
Microcephalus	3	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
Other Central Nervous System Anomalies	6	0	0	0	1	0	0	0	3	1	0	1	0	0	0	0
Heart Malformations	66	2	2	1	2	0	0	1	40	2	3	11	0	0	1	1
Other Circulatory/Respiratory Anomalies	80	2	0	7	0	1	0	1	56	5	1	2	3	1	0	1
Rectal Atresia/Stenosis	6	0	0	0	1	0	1	0	4	0	0	0	0	0	0	0
Tracheo-Esophageal Fistula/ Esophageal Atresia	6	0	0	0	2	0	0	1	1	0	0	2	0	0	0	0
Omphalocele/Gastroschisis	25	0	0	3	0	0	0	0	12	0	0	7	1	0	0	2
Other Gastrointestinal Anomalies	12	1	1	0	0	0	0	0	5	0	0	3	1	0	0	1
Malformed Genitalia	22	1	1	1	1	0	0	0	14	1	1	2	0	0	0	0
Renal Agenesis	2	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
Other Urogenital Anomalies	61	2	5	2	3	0	0	0	42	0	2	2	1	0	2	0
Cleft Lip/Palate	70	3	4	8	3	2	0	0	30	4	2	7	2	0	3	2
Polydactyly/Syndactyly/Adactyly	30	2	3	1	0	0	0	0	17	0	0	4	1	0	2	0
Club Foot	39	0	1	2	0	0	0	1	24	2	1	6	0	0	1	1
Diaphragmatic Hernia	16	0	0	0	0	1	0	1	9	0	2	2	0	0	1	0
Other Muscosceletal/Integumental Anomalies	37	4	2	5	0	1	0	0	15	0	2	2	0	0	1	0
Down's Syndrome	41	3	0	2	0	2	0	0	19	0	3	3	1	1	1	6
Other Chromosomal Anomalies	26	2	2	2	0	0	0	0	11	0	1	0	6	0	1	1
Other	557	20	23	15	14	1	0	3	316	35	24	42	40	7	11	6
Unknown	84	3	0	0	1	0	0	27	26	16	1	3	1	0	1	5
TOTAL	1,088	39	38	42	25	8	1	33	601	64	39	91	50	9	21	27

TABLE 6-41

BIRTHS WITH CONGENITAL ANOMALIES MENTIONED ON BIRTH CERTIFICATE BY CHILD'S ETHNIC GROUP AND GENDER, ARIZONA, 1990

ETHNICITY OF CHILD

Congenital Anomalies	Total	White		Hispanic		Black		Native American		Other Race	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Anencephalus	9	3	2	2	2	0	0	0	0	0	0
Spina Bifida/Meningocele	10	1	3	2	2	0	0	0	1	1	0
Hydrocephalus	16	2	5	2	2	1	0	2	1	0	1
Microcephalus	3	0	2	1	0	0	0	0	0	0	0
Other Central Nervous System Anomalies	6	1	2	1	1	0	0	0	1	0	0
Heart Malformations	66	23	12	7	9	3	0	4	7	0	1
Other Circulatory/Respiratory Anomalies	80	30	16	14	7	1	5	3	4	0	0
Rectal Atresia/Stenosis	6	4	2	0	0	0	0	0	0	0	0
Tracheo-Esophageal Fistula/ Esophageal Atresia	6	0	3	0	1	0	1	0	1	0	0
Omphalocele/Gastroschisis	25	7	5	8	1	0	1	1	2	0	0
Other Gastrointestinal Anomalies	12	4	3	2	1	0	1	1	0	0	0
Malformed Genitalia	22	8	0	5	6	1	1	0	1	0	0
Renal Agenesis	2	2	0	0	0	0	0	0	0	0	0
Other Urogenital Anomalies	61	31	4	16	2	0	0	6	1	1	0
Cleft Lip/Palate	70	17	20	7	7	2	1	11	5	0	0
Polydactyly/Syndactyly/Adactyly	30	9	4	6	3	2	3	1	1	1	0
Club Foot	39	12	9	5	5	2	3	1	2	0	0
Diaphragmatic Hernia	16	6	3	2	1	3	0	0	1	0	0
Other Muscosceletal/Integumental Anomalies	32	8	6	5	4	0	1	2	6	0	0
Down's Syndrome	41	7	11	5	9	0	0	4	4	1	0
Other Chromosomal Anomalies	26	8	6	6	4	0	0	0	2	0	0
Other	557	169	106	82	66	14	13	46	53	4	4
Unknown	84	9	17	19	12	2	4	7	10	3	1
TOTAL	1,088	327	219	172	126	29	29	80	88	11	7

TABLE 6-42

TOTAL BIRTHS AND LOW-BIRTHWEIGHT BIRTHS BY THE PAYING PARTY FOR THE DELIVERY AND MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	TOTAL BIRTHS, ALL WEIGHTS						LOW-BIRTHWEIGHT BIRTHS:					
COUNTY OF RESIDENCE	TOTAL	AHCCCS[1]	IHS[2]	PRIVATE INSURANCE	SELF	UNKNOWN	TOTAL	AHCCCS	IHS	PRIVATE INSURANCE	SELF	UNKNOWN
ARIZONA	68,814	21,491	3,590	32,797	8,280	2,656	4,451	1,749	172	1,849	507	174
Apache	1,800	225	954	168	27	426	117	29	42	16	10	20
Cochise	1,738	657	2	813	238	28	112	46	0	53	11	2
Coconino	1,965	497	728	597	92	51	165	57	39	35	5	9
Gila	749	432	91	176	40	10	48	27	5	7	9	0
Graham	424	217	32	132	38	5	20	14	0	4	1	1
Greenlee	105	49	0	44	7	5	5	2	0	1	1	1
La Paz	162	60	9	45	19	29	12	4	1	1	3	3
Maricopa	40,414	11,916	478	21,601	5,549	870	2,615	974	19	1,205	362	55
Mohave	1,488	532	10	566	161	219	99	49	0	40	5	5
Navajo	1,972	455	947	349	97	124	151	54	51	31	6	9
Pima	11,412	3,628	217	5,792	993	782	717	278	8	327	46	58
Pinal	2,133	1,092	107	689	195	50	145	84	6	42	9	4
Santa Cruz	784	418	0	224	122	20	59	30	0	14	10	5
Yavapai	1,220	543	5	454	210	8	83	45	1	29	7	1
Yuma	2,448	770	10	1,147	492	29	123	56	0	44	22	1

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[1] The Arizona Health Care Cost Containment System is the state's alternative to Medicaid.
[2] Indian Health Services.

TABLE 6-43

MEDICAL AND OTHER RISK FACTORS BY MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	Total	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
MEDICAL RISK FACTORS:[1]																
Anemia	1,168	99	70	51	31	3	2	10	519	36	93	135	101	0	8	10
Cardiac Disease	190	14	3	5	1	0	0	0	107	6	4	46	1	0	2	1
Acute or Chronic Lung Disease	107	4	0	4	1	0	0	0	69	14	3	9	2	0	1	0
Diabetes	1,454	139	18	56	21	4	2	1	685	24	101	281	59	10	7	46
Genital Herpes	753	10	7	14	4	2	1	1	513	25	3	134	7	0	24	8
Hydramnios/Oligohydramnios	337	18	2	40	7	2	1	1	173	2	30	49	5	0	4	3
Hemoglobinopathy	5	0	0	1	0	0	0	0	2	1	0	0	1	0	0	0
Hypertension, Chronic	399	24	9	49	8	1	0	2	190	17	14	59	6	1	6	13
Hypertension, Pregnancy-Associated	1,761	131	62	107	32	13	1	5	754	45	107	388	44	5	17	50
Eclampsia	408	26	14	14	5	2	0	2	169	5	31	93	25	5	14	3
Previous Infant 4,000+ Grams	367	30	21	62	20	14	4	1	98	9	30	64	8	0	5	1
Previous Preterm or Small-For-Gestational Age Infant	438	39	17	52	23	3	0	0	146	11	44	70	13	0	19	1
Renal Disease	103	32	2	8	4	0	0	0	32	2	14	7	1	0	0	1
Rh Sensitization	409	9	40	8	4	0	0	6	206	52	9	3	8	0	62	2
Uterine Bleeding	301	5	10	24	11	0	1	4	115	26	14	76	5	1	4	5
Other	8,303	264	75	336	88	18	9	40	3,110	351	328	2,849	498	50	222	65
TOTAL	14,286	687	299	684	222	60	18	57	6,085	526	677	3,694	692	68	328	189
OTHER RISK FACTORS:																
Alcohol use during pregnancy	1,343	26	42	38	25	8	4	13	863	73	37	160	38	1	9	6
Tobacco use during pregnancy	9,019	42	213	145	125	59	20	26	5,556	424	117	1,445	338	3	265	241
Both	1,242	12	20	22	28	17	4	6	784	61	25	174	56	3	24	6
None	57,210	1,720	1,463	1,760	571	340	77	117	32,211	930	1,793	9,633	1,701	777	922	2,195
TOTAL	68,814	1,800	1,738	1,965	749	424	105	162	40,414	1,488	1,972	11,412	2,133	784	1,220	2,448

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[1] Will not add to total births since more than one medical risk factor might be reported.

TABLE 6-44

OBSTETRIC PROCEDURES AND METHOD OF DELIVERY BY MOTHER'S COUNTY OF RESIDENCE, AND WOMEN GIVING BIRTH, ARIZONA, 1990

	Total	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
OBSTETRIC PROCEDURES:[1]																
Amniocentesis	1,722	19	24	82	29	9	1	5	994	37	36	411	52	8	12	3
Electronic Fetal Monitoring	46,709	1,411	1,378	1,802	538	367	91	106	27,005	619	1,598	6,984	1,366	121	1,053	2,270
Induction of Labor	7,381	174	139	326	99	17	10	11	4,905	167	200	842	215	13	142	121
Stimulation of Labor	8,778	172	191	313	62	117	26	20	5,700	352	158	1,122	174	11	329	31
Tocolysis	627	38	7	69	16	5	1	5	262	31	21	118	18	2	29	5
Ultrasound	47,018	963	721	1,049	561	344	83	110	29,527	1,131	1,041	6,828	1,411	577	1,043	1,629
Other	8,814	58	27	73	19	7	1	6	5,395	45	100	2,795	211	33	35	9
METHOD OF DELIVERY:[2]																
Vaginal	53,290	1,499	1,390	1,521	580	333	81	100	31,612	1,146	1,625	8,358	1,656	580	923	1,886
Vaginal After Previous Cesarean Section	1,666	88	42	110	21	8	1	0	943	21	90	232	36	6	30	38
Primary Cesarean Section	8,264	138	195	209	84	48	16	22	4,836	158	160	1,508	248	116	164	362
Repeat Cesarean Section	4,527	70	102	111	56	35	7	11	2,569	140	85	848	175	70	80	168
Forceps	3,168	16	49	104	33	2	0	3	2,069	111	43	578	54	13	37	56
Vacuum	2,914	24	175	30	10	25	12	4	1,613	30	21	572	51	26	8	313
TOTAL	68,686	1,796	1,736	1,962	748	424	105	134	40,370	1,472	1,969	11,398	2,131	784	1,218	2,439

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[1] Will not add to total births since more than one obstetric procedure might be reported.
[2] Will not add to total births since more than one method of delivery might be required.

TABLE 6-45

COMPLICATIONS OF LABOR AND/OR DELIVERY BY MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	Total	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
COMPLICATIONS OF LABOR AND DELIVERY[1]																
Febrile (100 F. or 38 C.)	766	18	6	32	6	1	1	1	474	6	18	186	7	5	2	3
Meconium (Moderate/Heavy)	4,206	122	34	126	32	7	1	10	2,433	103	139	840	168	10	53	128
Premature Rupture of Membrane	1,729	130	45	102	34	4	0	5	872	46	115	223	55	4	26	68
Abruption Placenta	349	8	8	30	3	0	0	0	177	12	21	69	4	0	13	4
Placenta Previa	179	7	0	5	7	0	0	1	101	6	7	22	10	2	6	5
Other Excessive Bleeding	402	67	8	36	6	1	0	2	168	7	46	40	11	1	4	5
Seizures During Labor	31	2	1	0	0	1	0	0	20	1	2	4	0	0	0	0
Precipitous Labor (<3 Hours)	700	22	17	55	25	3	3	1	321	14	44	140	36	1	13	5
Prolonged Labor (>20 Hours)	632	59	58	54	26	6	2	3	220	14	72	73	14	4	12	15
Dysfunctional Labor	1,235	104	77	118	27	26	5	0	452	4	61	320	21	9	9	2
Breech/Malpresentation	2,478	60	67	79	34	17	6	5	1,410	61	79	446	46	24	51	91
Cephalopelvic Disproportion	1,674	27	40	71	18	5	1	7	896	42	26	348	85	25	46	37
Cord Prolapse	156	6	2	19	0	0	1	0	85	6	5	9	9	0	8	6
Anesthetic Complications	26	0	1	0	0	0	0	0	15	1	0	6	2	1	0	0
Fetal Distress	2,490	84	50	77	42	8	1	1	1,498	20	104	354	71	37	61	82
Other	13,038	159	107	225	72	20	8	20	7,656	174	233	2,977	537	89	399	362
TOTAL	24,007	633	419	741	252	83	24	40	13,604	416	710	4,848	863	181	538	655

[1] Will not add to total births since more than one complication might be reported.

TABLE 6-46

ABNORMAL CONDITIONS OF THE NEWBORN BY MOTHER'S COUNTY OF RESIDENCE, ARIZONA, 1990

	Total[1]	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
ABNORMAL CONDITIONS OF THE NEWBORN																
Anemia (Hct. <39/Hgb.< 13)	122	4	0	7	1	0	0	0	64	3	5	24	8	1	2	3
Birth Injury	69	4	11	2	0	2	0	1	38	2	0	3	2	0	1	3
Fetal Alcohol Syndrome	21	3	0	1	2	0	0	6	0	5	1	1	0	1	0	1
Hyaline Membrane Disease/Rds.	272	10	4	10	6	1	0	1	172	28	10	10	4	0	9	7
Meconium Aspiration Syndrome	187	11	7	6	3	3	2	1	102	15	9	9	15	0	2	2
Assisted Ventilation <30 Min.	669	19	17	26	10	7	1	5	312	22	24	20	42	0	153	11
Assisted Ventilation ≥30 Min.	430	24	13	17	10	3	0	1	214	18	36	16	8	1	65	4
Seizures	47	1	1	1	2	1	0	1	21	3	1	12	2	1	0	0
Other	4,221	63	50	64	37	11	1	21	2,169	159	123	905	416	33	139	30
TOTAL	5,279	113	90	97	59	23	3	26	2,679	210	167	981	459	35	290	47

[1] Will not add to total births since more than one abnormal condition might be reported.

MATERNAL, PERINATAL AND INFANT MORTALITY STATISTICS

TABLE 7-1

MATERNAL DEATHS[1] BY AGE GROUP AND MATERNAL MORTALITY RATES,[2] ARIZONA AND UNITED STATES, 1980-1990

Year	Total Number of Deaths	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Arizona Rate	U.S. Rate
1980	4	0	1	1	0	1	1	0	0	8.0	9.2
1981	4	0	1	1	1	0	0	1	0	7.7	9.3
1982	4	0	0	1	1	0	1	1	0	7.6	8.9
1983	3	0	1	1	0	0	1	0	0	5.7	8.0
1984	4	0	0	0	2	1	1	0	0	7.3	7.8
1985	1	0	0	0	0	1	0	0	0	1.7	7.8
1986	1	0	1	0	0	0	0	0	0	1.6	7.2
1987	1	0	0	0	1	0	0	0	0	1.6	6.6
1988	4	0	1	2	0	1	0	0	0	6.1	8.4
1989	4	0	1	0	2	1	0	0	0	6.0	7.9[#]
1990	3	0	0	0	1	2	0	0	0	4.4	NA

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[1] Maternal deaths are those assigned to complications of pregnancy, childbirth and puerperium, category numbers 630-676 of the Ninth Revision, International Classification of Diseases, 1975.

[2] Rates per 100,000 live births.

[#] Preliminary

TABLE 7-2

PERINATAL DEATHS[1] AND PERINATAL MORTALITY RATIOS[2] BY COUNTY OF MOTHER'S RESIDENCE, ARIZONA, 1990

	PERINATAL MORTALITY II				PERINATAL MORTALITY III			
			Total Perinatal deaths				Total Perinatal deaths	
County	Number of infant deaths of less than 28 days	Number of fetal deaths of 20 or more weeks of gestation	#	Ratio (II)	Number of infant deaths of less than 7 days	Number of fetal deaths of 20 or more weeks of gestation	#	Ratio (III)
ARIZONA	373	276	649	9.4	301	276	577	8.4
Apache	10	8	18	10.0	9	8	17	9.4
Cochise	7	6	13	7.5	7	6	13	7.5
Coconino	13	4	17	8.7	10	4	14	7.1
Gila	0	3	3	4.0	0	3	3	4.0
Graham	1	2	3	7.1	0	2	2	4.7
Greenlee	0	0	0	-	0	0	0	-
La Paz	2	2	4	24.7	0	2	2	12.3
Maricopa	232	166	398	9.8	195	166	361	8.9
Mohave	11	4	15	10.1	10	4	14	9.4
Navajo	10	10	20	10.1	6	10	16	8.1
Pima	52	47	99	8.7	38	47	85	7.4
Pinal	9	12	21	9.8	7	12	19	8.9
Santa Cruz	7	0	7	8.9	7	0	7	8.9
Yavapai	5	5	10	8.2	4	5	9	7.4
Yuma	14	7	21	8.6	8	7	15	6.1

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[1] Excluded fetal deaths of less than 500 g.

[2] All ratios per 1,000 live births. The Perinatal Mortality Ratio I (referring to fetal deaths of 28 or more weeks of gestation) cannot be computed, because information on gestational age is not entered into the database from fetal death certificates in Arizona.

TABLE 7-3

FETAL DEATHS OCCURRING IN ARIZONA BY COUNTY OF OCCURRENCE,[1] ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	
											ALL	$\geq$ 500g
ARIZONA	428	394	434	393	371	432	391	433	430	383	410	285
Apache	6	16	12	14	13	10	13	15	8	7	11	10
Cochise	10	13	12	7	9	10	8	10	11	7	5	5
Coconino	16	17	22	25	18	22	12	10	19	12	16	10
Gila	3	8	3	7	5	2	4	2	3	3	1	0
Graham	2	3	2	4	3	1	5	3	2	6	0	0
Greenlee	2	1	2	1	-	-	-	1	0	0	0	0
La Paz[2]	NA	NA	NA	1	-	-	-	1	0	0	0	0
Maricopa	229	198	225	190	211	232	225	269	271	225	256	183
Mohave	5	3	4	8	10	10	11	10	8	7	4	3
Navajo	5	11	11	10	10	14	6	9	8	10	7	5
Pima	113	97	115	89	70	91	83	73	72	73	75	47
Pinal	9	10	6	7	7	4	7	7	6	5	7	6
Santa Cruz	3	4	1	3	3	-	-	3	1	2	4	0
Yavapai	8	2	9	7	5	11	6	5	7	7	6	5
Yuma	17	11	10	20	7	15	11	15	14	19	18	11

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[1] Resident and non-resident fetal deaths occurring in Arizona.

[2] Included in Yuma County prior to 1983.

TABLE 7-4

FETAL MORTALITY BY COUNTY OF RESIDENCE OF MOTHER, ARIZONA, SELECTED YEARS, 1980-1990

County of Residence	1980[1]	1985	1986	1987	1988	1989	1990	
							ALL	≥ 500g
ARIZONA	428	415	381	422	419	375	401	276
Apache	6	11	15	15	9	7	9	8
Cochise	10	12	10	11	14	5	7	6
Coconino	16	24	7	14	17	9	10	4
Gila	3	3	6	2	4	5	4	3
Graham	2	2	4	2	2	6	3	2
Greenlee	2	2	1	2	3	3	0	0
La Paz[2]	NA	2	1	2	2	2	2	2
Maricopa	229	217	208	242	247	213	234	166
Mohave	5	8	9	10	7	6	5	4
Navajo	5	20	8	13	15	17	15	10
Pima	113	72	76	68	60	62	73	47
Pinal	9	12	19	13	21	12	15	12
Santa Cruz	3	5	1	4	2	2	4	0
Yavapai	8	12	7	8	6	7	6	5
Yuma	17	13	9	16	10	19	14	7

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[1] Data for 1980 refer to fetal deaths occurring in Arizona by county of occurrence.

[2] Included in Yuma County prior to 1983.

TABLE 7-5

FETAL MORTALITY RATIOS[1] BY COUNTY OF RESIDENCE OF MOTHER, ARIZONA, 1980-1990

County of Residence	1980[1]	1985	1986	1987	1988	1989	1990	
							ALL	≥ 500g
ARIZONA	8.5	7.0	6.3	6.7	6.4	5.7	5.8	4.0
Apache	4.9	5.9	8.5	8.1	4.8	3.9	5.0	4.4
Cochise	6.6	7.7	6.6	6.8	8.6	4.0	4.0	3.5
Coconino	7.1	12.3	3.8	7.0	8.7	5.9	5.1	2.0
Gila	5.2	4.7	9.6	3.5	6.1	4.6	5.3	4.0
Graham	5.0	4.9	10.1	4.5	4.8	13.4	7.1	4.7
Greenlee	6.5	12.4	9.4	16.1	27.0	-	-	-
La Paz[2]	NA	8.5	4.7	10.1	9.4	-	12.3	12.3
Maricopa	8.2	6.4	5.9	6.6	6.5	5.7	5.8	4.1
Mohave	5.8	8.3	8.5	8.5	5.7	5.2	3.4	2.7
Navajo	4.2	10.6	4.2	6.6	7.7	5.0	7.6	5.1
Pima	11.4	6.7	7.3	6.2	5.4	6.5	6.4	4.1
Pinal	9.8	5.9	9.3	6.1	10.0	2.4	7.0	5.6
Santa Cruz	9.7	9.6	2.0	7.3	3.0	2.9	5.1	-
Yavapai	9.5	11.0	6.2	6.8	4.7	5.6	4.9	4.1
Yuma	10.2	6.6	4.6	8.1	4.8	8.1	5.7	2.9

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[1] Number of fetal deaths per 1,000 live births.
[2] Included in Yuma County prior to 1983.

TABLE 7-6

FETAL MORTALITY[1] BY COUNTY OF RESIDENCE OF MOTHER, RACE AND SEX OF CHILD, ARIZONA, 1990

	Total Fetal Deaths			White			Non-White			Black			Native American			Other		
	All	Male	Female	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
TOTAL	276[2]	155	120	213	121	92	62	34	28	31	15	16	29	18	11	2	1	1
Ratio[3]	4.0	4.4	3.6	3.6	4.0	3.2	6.0	6.6	5.5	9.8	9.3	10.4	4.7	5.8	3.6	2.1	2.1	2.1
Apache	8	4	4	2	1	1	6	3	3	0	0	0	6	3	3	0	0	0
Cochise	6	3	3	5	3	2	1	0	1	1	0	1	0	0	0	0	0	0
Coconino	4	3	1	3	2	1	1	1	0	0	0	0	1	1	0	0	0	0
Gila	3	2	1	1	1	0	2	1	1	0	0	0	2	1	1	0	0	0
Graham	2	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Greenlee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
La Paz	2	2	0	0	0	0	2	2	0	0	0	0	2	2	0	0	0	0
Maricopa	166	100	65	137	82	55	29	18	10	21	12	9	6	6	0	1	0	1
Mohave	4	2	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0
Navajo	10	4	6	3	1	2	7	3	4	0	0	0	7	3	4	0	0	0
Pima	47	22	25	37	19	18	10	3	7	6	2	4	3	0	3	1	1	0
Pinal	12	6	6	8	4	4	4	2	2	2	0	2	2	2	0	0	0	0
Santa Cruz	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yavapai	5	4	1	4	3	1	1	1	0	1	1	0	0	0	0	0	0	0
Yuma	7	2	5	7	2	5	0	0	0	0	0	0	0	0	0	0	0	0

[1] Excluded fetal deaths of less than 500 grams.

[2] Includes one record with undetermined sex and unknown race in Maricopa County.

[3] Number of fetal deaths per 1,000 live births in specified ethnic/gender group.

TABLE 7-7

FETAL MORTALITY[1] BY MOTHER'S AGE GROUP AND COUNTY OF RESIDENCE, ARIZONA, 1990

		AGE GROUP							
	Total	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40+
Arizona	276	1	12	30	72	74	50	29	8
Ratio[2]	4.0	5.3	3.5	4.9	3.1	4.5	3.8	6.1	10.1
Apache	8	0	0	0	2	3	2	1	0
Cochise	6	0	0	0	2	3	1	0	0
Coconino	4	0	0	1	1	2	0	0	0
Gila	3	0	0	0	2	0	0	0	1
Graham	2	0	0	0	2	0	0	0	0
Greenlee	0	0	0	0	0	0	0	0	0
La Paz	2	0	0	0	0	0	0	2	0
Maricopa	166	0	7	16	42	42	37	16	6
Mohave	4	0	1	1	1	1	0	0	0
Navajo	10	0	0	2	2	3	1	2	0
Pima	47	0	2	8	11	13	6	7	0
Pinal	12	1	1	1	4	2	2	1	0
Santa Cruz	0	0	0	0	0	0	0	0	0
Yavapai	5	0	1	0	2	1	0	0	1
Yuma	7	0	0	1	1	4	1	0	0

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[1] Excluded fetal deaths of less than 500 grams.
[2] Ratio per 1,000 live births in specific group.

TABLE 7-8

INFANT MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, 1980-1990

County of Residence	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	619	600	491	509	525	572	569	598	634	613	602
Apache	23	25	21	20	25	22	16	16	10	13	15
Cochise	19	22	14	20	23	15	8	11	14	12	13
Coconino	20	20	16	22	16	21	18	15	22	18	22
Gila	12	5	13	5	3	5	8	3	7	3	3
Graham	8	14	4	3	7	4	5	4	3	5	4
Greenlee	5	1	5	-	2	3	1	-	2	-	-
La Paz[1]	NA	NA	NA	8	1	6	-	1	2	2	3
Maricopa	358	333	265	266	272	319	340	368	382	362	359
Mohave	18	8	11	9	8	7	11	10	15	23	17
Navajo	27	29	18	23	18	26	12	31	21	31	23
Pima	72	84	76	88	96	94	94	84	104	81	93
Pinal	17	17	19	17	27	18	27	19	15	23	17
Santa Cruz	3	5	3	3	4	4	4	7	8	8	8
Yavapai	11	15	10	11	11	9	13	11	13	12	8
Yuma	26	22	16	14	12	19	12	18	16	20	17

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[1] Inluded in Yuma County prior to 1983.

TABLE 7-9

INFANT MORTALITY RATES[1] BY AGE AND SELECTED CAUSES, ARIZONA, UNITED STATES, 1990

Age and Cause of Death	International Classification of Diseases, Ninth Revision	Arizona Number	Arizona Rate	U.S. Rate[2]
Total - Under 1 Year		602	874.8	908.0
Under 28 Days		373	542.0	574.7
28 Days to 364 Days		229	332.8	333.3
Certain Gastrointestinal Diseases	008-009,535,555-558	4	5.8	5.0
Pneumonia and Influenza	480-487	11	16.0	14.1
Congenital Anomalies	740-759	170	247.0	205.2
Disorders Relating to Short Gestation and Unspecified Low-Birthweight	765	59	85.7	95.1
Birth Trauma	767	1	1.5	4.1
Intrauterine Hypoxia and Birth Asphyxia	768	16	23.3	18.8
Respiratory Distress Syndrome	769	18	26.2	59.1
Other Conditions Originating in the Perinatal Period	760-764,766,770-779	141	204.9	232.2
Sudden Infant Death Syndrome	798.0	94	136.6	129.0
ALL OTHER CAUSES	RESIDUAL	88	127.9	145.4

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[1] Per 100,000 live births

[2] Provisional

TABLE 7-10

INFANT MORTALITY BY COUNTY OF RESIDENCE, CHILD'S ETHNIC GROUP AND GENDER, ARIZONA, 1990

	Total Infant Deaths			White[1]			Hispanic[2]			Black			Native American			Other		
	All	Male	Female	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
ARIZONA	602	370	232	302	184	118	168	103	65	53	33	20	73	47	26	6	3	3
Apache	15	7	8	0	0	0	2	1	1	0	0	0	13	6	7	0	0	0
Cochise	13	3	10	6	3	3	5	0	5	1	0	1	0	0	0	1	0	1
Coconino	22	17	5	12	9	3	2	2	0	0	0	0	8	6	2	0	0	0
Gila	3	2	1	1	1	0	0	0	0	0	0	0	2	1	1	0	0	0
Graham	4	3	1	1	1	0	0	0	0	0	0	0	3	2	1	0	0	0
Greenlee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
La Paz	3	2	1	1	1	0	1	1	0	0	0	0	1	0	1	0	0	0
Maricopa	359	221	138	195	116	79	109	69	40	39	25	14	15	10	5	1	1	0
Mohave	17	8	9	17	8	9	0	0	0	0	0	0	0	0	0	0	0	0
Navajo	23	15	8	5	3	2	1	1	0	0	0	0	17	11	6	0	0	0
Pima	93	62	31	44	32	12	26	15	11	9	5	4	10	8	2	4	2	2
Pinal	17	11	6	5	2	3	6	5	1	3	2	1	3	2	1	0	0	0
Santa Cruz	8	6	2	1	1	0	7	5	2	0	0	0	0	0	0	0	0	0
Yavapai	8	4	4	6	3	3	1	0	1	0	0	0	1	1	0	0	0	0
Yuma	17	9	8	8	4	4	8	4	4	1	1	0	0	0	0	0	0	0

[1] Non-Hispanic.
[2] White of Hispanic origin.

TABLE 7-11

INFANT MORTALITY RATES[1] BY COUNTY OF RESIDENCE, CHILD'S ETHNIC GROUP AND GENDER, ARIZONA, 1990

County of Residence	All Infant Deaths			White[2]			Hispanic[3]			Black			Native American			Other		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
ARIZONA	8.7	10.5	6.9	8.2	9.7	6.6	7.8	9.4	6.1	16.8	20.5	13.0	11.8	15.1	8.5	6.4	6.4	6.3
Apache	8.3	7.8	8.9	-	-	-	33.3	33.3	33.3	-	-	-	8.4	7.8	9.1	-	-	-
Cochise	7.5	3.4	11.7	7.5	7.6	7.4	6.8	-	14.2	*	-	*	-	-	-	20.0	-	47.6
Coconino	11.2	16.7	5.3	15.5	23.2	7.8	9.3	19.4	-	-	-	-	8.7	12.0	4.8	-	-	-
Gila	4.0	5.2	2.7	2.9	5.7	-	-	-	-	-	-	-	8.9	8.5	9.4	-	-	-
Graham	9.4	14.4	4.6	5.1	10.4	-	-	-	-	-	-	-	44.1	69.0	25.6	-	-	-
Greenlee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
La Paz	18.5	25.0	12.2	14.3	27.0	-	16.1	33.3	-	-	-	-	34.5	-	62.5	-	-	-
Maricopa	8.9	10.7	7.0	8.0	9.2	6.7	9.2	11.5	6.8	17.5	22.8	12.8	12.8	17.6	8.3	1.6	3.3	-
Mohave	11.4	10.7	12.2	13.5	12.5	14.5	-	-	-	-	-	-	-	-	-	-	-	-
Navajo	11.7	14.9	8.3	10.4	11.8	8.9	6.8	11.5	-	-	-	-	12.8	16.8	9.0	-	-	-
Pima	8.1	10.5	5.6	7.8	11.0	4.4	5.6	6.3	4.9	19.0	19.7	18.3	21.2	33.8	8.5	19.7	18.9	20.6
Pinal	8.0	10.3	5.6	5.9	4.8	7.0	6.9	11.3	2.3	30.6	37.7	22.2	9.9	13.5	6.4	-	-	-
Santa Cruz	10.2	15.4	5.1	18.2	45.5	-	9.7	13.8	5.5	-	-	-	-	-	-	-	-	-
Yavapai	6.6	6.3	6.8	6.1	6.0	6.2	5.4	-	11.8	-	-	-	24.4	35.7	-	-	-	-
Yuma	6.9	7.4	6.5	10.8	10.5	11.0	5.2	5.2	5.2	9.7	23.3	-	-	-	-	-	-	-

[1] Rate per 1,000 live births in specific group, and calculated only if at least ten births recorded in that group in 1989.
[2] Includes only whites of Non-Hispanic origin.
[3] White of Hispanic origin.
- No infants deaths recorded in 1990.
* Less than ten births recorded in that group in 1990.

TABLE 7-12

NEONATAL MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	414	381	305	314	305	348	331	376	384	368	373
Apache	9	12	6	11	9	12	9	5	5	8	10
Cochise	13	15	10	15	13	8	5	10	7	8	7
Coconino	11	11	10	13	5	9	6	7	14	7	13
Gila	8	2	8	2	1	3	5	3	5	2	0
Graham	4	10	2	2	4	2	3	1	2	5	1
Greenlee	2	0	5	0	2	2	1	0	2	0	0
La Paz[1]	NA	NA	NA	3	1	4	0	1	2	0	2
Maricopa	260	230	174	167	170	197	204	236	244	225	232
Mohave	10	4	5	4	6	2	4	6	5	13	11
Navajo	15	15	8	9	8	13	4	17	7	18	10
Pima	48	53	47	56	62	68	66	54	65	45	52
Pinal	14	8	8	15	11	7	12	12	9	17	9
Santa Cruz	3	2	2	2	2	4	3	6	3	3	7
Yavapai	4	5	6	7	5	6	5	7	8	8	5
Yuma	13	14	14	8	6	11	4	11	6	9	14

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[1] Included in Yuma County prior to 1983.

TABLE 7-13

NEONATAL MORTALITY RATES[1] BY COUNTY OF RESIDENCE, ARIZONA, UNITED STATES, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	8.4	7.9	7.7	7.3	6.9	6.9	6.7	6.5	6.4	6.2[2]	5.7[2]
ARIZONA	8.3	7.4	5.8	5.9	5.5	5.9	5.4	5.9	5.9	5.5	5.4
Apache	5.5	7.1	3.3	6.2	5.0	6.5	5.1	2.7	2.6	4.5	5.6
Cochise	8.2	9.1	6.4	9.6	8.0	5.1	3.3	6.2	4.3	4.6	4.0
Coconino	6.0	6.3	5.7	7.2	2.8	4.6	3.3	3.5	7.1	3.4	6.6
Gila	11.3	2.6	9.9	2.9	1.5	4.7	8.0	5.3	7.6	3.1	-
Graham	7.8	19.6	4.3	4.6	9.0	4.9	7.6	2.3	4.8	11.2	2.4
Greenlee	7.3	-	19.5	-	10.3	12.4	9.4	-	18.0	-	-
La Paz[3]	NA	NA	NA	12.7	5.1	17.1	-	5.1	9.3	-	12.3
Maricopa	9.7	8.3	6.1	5.8	5.5	5.8	5.8	6.4	6.4	5.7	5.7
Mohave	11.5	4.5	5.6	4.3	6.1	2.1	3.8	5.1	4.1	9.6	7.4
Navajo	7.9	8.3	4.2	4.7	4.3	6.9	2.1	8.6	3.6	9.0	5.1
Pima	5.4	5.8	5.1	5.8	6.4	6.6	6.3	4.9	5.8	4.0	4.6
Pinal	7.6	4.2	4.1	8.0	5.9	3.4	5.8	5.6	4.3	8.1	4.2
Santa Cruz	6.0	3.9	4.1	4.4	3.9	7.6	5.9	11.0	4.5	4.3	8.9
Yavapai	4.3	5.0	5.6	6.8	5.0	5.5	4.4	6.0	6.2	6.4	4.1
Yuma	7.3	7.2	7.4	4.8	3.4	5.6	2.0	5.6	2.9	3.9	5.7

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[1] Per 1,000 live births.
[2] Preliminary.
[3] Included in Yuma County prior to 1983.

TABLE 7-14

POSTNEONATAL MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	205	219	186	195	220	224	238	222	250	245	229
Apache	14	13	15	9	16	10	7	11	5	5	5
Cochise	6	7	4	5	10	7	3	1	7	4	6
Coconino	9	9	6	9	11	12	12	8	8	11	9
Gila	4	3	5	3	2	2	3	0	2	1	3
Graham	4	4	2	1	3	2	2	3	1	0	3
Greenlee	3	1	0	0	0	1	0	0	0	0	0
La Paz[1]	NA	NA	NA	5	0	2	0	0	0	2	1
Maricopa	98	103	91	99	102	122	136	132	138	137	127
Mohave	8	4	6	5	2	5	7	4	10	10	6
Navajo	12	14	10	14	10	13	8	14	14	13	13
Pima	24	31	29	32	34	26	28	30	39	36	41
Pinal	3	9	11	2	16	11	15	7	6	6	8
Santa Cruz	0	3	1	1	2	0	1	1	5	5	1
Yavapai	7	10	4	4	6	3	8	4	5	4	3
Yuma	13	8	2	6	– 6	8	8	7	10	11	3

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[1] Included in Yuma County prior to 1983.

TABLE 7-15

POSTNEONATAL MORTALITY RATES[1] BY COUNTY OF RESIDENCE, ARIZONA, UNITED STATES, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	4.2	4.0	3.8	3.9	3.9	3.7	3.7	3.5	3.5	3.6[2]	3.4[2]
ARIZONA	4.1	4.2	3.5	3.7	4.0	3.8	4.0	3.5	3.8	3.6	3.3
Apache	8.6	7.7	8.1	5.0	8.8	5.4	4.0	5.9	2.6	2.8	2.8
Cochise	3.8	4.3	2.6	3.2	6.2	4.5	1.9	0.6	4.3	2.3	3.5
Coconino	4.9	5.2	3.4	5.0	6.1	6.2	6.5	4.0	4.1	5.4	4.6
Gila	5.7	3.9	6.2	4.4	3.0	3.1	4.8	-	3.0	1.5	4.0
Graham	7.8	7.9	4.3	5.4	6.7	4.9	5.1	6.7	4.8	-	7.1
Greenlee	11.0	3.3	-	-	-	6.2	-	-	-	-	-
La Paz[3]	NA	NA	NA	21.2	-	8.5	-	-	-	9.2	6.2
Maricopa	3.7	3.7	3.2	3.4	3.3	3.6	3.8	3.6	3.6	3.5	3.1
Mohave	9.2	4.5	6.8	1.1	2.0	5.2	6.5	3.4	8.2	7.4	4.0
Navajo	6.3	7.7	5.3	7.3	5.4	6.9	4.2	7.1	7.2	6.6	6.6
Pima	2.7	3.4	3.2	3.3	3.5	2.5	2.7	2.8	3.5	3.2	3.6
Pinal	1.6	4.7	5.7	1.1	8.7	5.4	7.3	3.3	2.9	2.9	3.8
Santa Cruz	-	5.8	2.0	2.2	3.9	-	2.0	1.8	7.5	7.1	1.3
Yavapai	7.5	10.0	3.7	3.9	6.0	2.8	7.1	3.4	3.9	3.2	2.5
Yuma	7.3	4.1	1.1	3.6	3.4	4.1	4.1	3.5	4.8	4.7	1.2

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[1] Per 1,000 live births.
[2] Preliminary.
[3] Included in Yuma County prior to 1983.

TABLE 7-16

NEONATAL, POSTNEONATAL AND TOTAL INFANT MORTALITY BY CHILD'S GENDER AND ETHNIC GROUP, ARIZONA, 1990

	Number of Deaths			Mortality Rates[1]		
Ethnic Group/Gender	Neonatal	Post-Neonatal	Total Infant	Neonatal	Post-Neonatal	Total Infant
White, total[2]	187	115	302	5.1	3.1	8.2
Male	112	72	184	4.9	3.8	9.7
Female	75	43	118	4.2	2.4	6.6
Hispanic, total[3]	115	53	168	5.3	2.5	7.8
Male	70	33	103	6.4	3.0	9.4
Female	45	20	65	4.2	1.9	6.1
Black, total	32	21	53	10.1	6.7	16.8
Male	22	11	33	13.6	6.8	20.5
Female	10	10	20	6.5	6.5	13.0
Native American, total	37	36	73	6.0	5.8	11.8
Male	19	28	47	6.1	9.0	15.1
Female	18	8	26	5.9	2.6	8.5
Other Race, total	2	4	6	2.1	4.3	6.4
Male	1	2	3	2.1	4.3	6.4
Female	1	2	3	2.0	4.2	6.3
All Ethnic Groups, total	373	229	602	5.4	3.3	8.7
Male	224	146	370	6.4	4.2	10.5
Female	149	83	232	4.4	2.5	6.9

[1] Number of deaths per 1,000 live births in specified ethnic/gender group. Denominators are from Table 6-12.

[2] Non-Hispanic.

[3] White of Hispanic origin.

DEATH STATISTICS

TABLE 8-1

MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	21,226	21,318	21,951	22,482	23,785	24,577	25,409	26,670	27,511	27,838	28,471
Apache	302	302	317	294	306	330	335	343	329	344	391
Cochise	631	628	644	712	664	687	662	764	748	748	797
Coconino	309	308	339	320	341	379	383	392	404	386	397
Gila	330	337	417	385	396	381	399	408	413	426	462
Graham	171	184	164	184	175	169	189	193	197	216	220
Greenlee	86	52	73	61	66	47	50	67	64	49	58
La Paz[1]	NA	NA	NA	140	154	136	128	151	157	144	132
Maricopa	11,769	11,923	12,214	12,433	13,398	13,661	14,106	14,746	15,217	15,495	15,805
Mohave	549	548	612	593	607	753	795	877	972	995	1,070
Navajo	415	415	400	406	428	460	484	462	471	506	521
Pima	4,311	4,253	4,279	4,506	4,734	4,865	5,090	5,295	5,362	5,324	5,571
Pinal	731	745	741	782	814	785	942	922	1,019	1,066	1,004
Santa Cruz	121	125	135	131	150	148	147	159	193	172	139
Yavapai	801	813	878	961	964	1,057	1,032	1,213	1,217	1,254	1,218
Yuma	700	685	738	574	588	719	667	678	748	713	680

[1] Included in Yuma County prior to 1983.

TABLE 8-2

MORTALITY BY COUNTY OF OCCURRENCE,[1] ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	22,054	21,925	22,655	23,205	24,598	25,382	26,404	27,628	28,449	28,964	29,433
Apache	240	199	231	212	202	250	254	250	225	243	265
Cochise	499	483	519	589	556	566	551	589	575	602	650
Coconino	382	363	392	391	439	469	493	496	479	484	440
Gila	284	303	355	304	308	299	312	329	317	358	375
Graham	132	133	117	154	144	141	139	150	162	175	180
Greenlee	61	40	59	38	42	19	27	2	27	19	32
La Paz	NA	NA	NA	118	120	120	132	133	127	133	118
Maricopa	12,671	12,730	13,169	13,450	14,614	14,791	15,345	15,975	16,621	16,891	17,136
Mohave	447	440	474	495	568	642	764	832	877	1,005	984
Navajo	303	325	294	290	298	306	382	369	357	337	397
Pima	4,960	4,826	4,847	5,060	5,234	5,413	5,596	5,873	5,959	5,950	6,182
Pinal	484	462	467	485	437	496	573	590	644	641	619
Santa Cruz	81	87	99	99	111	110	114	112	142	129	99
Yavapai	786	787	833	870	874	978	977	1,122	1,088	1,168	1,166
Yuma	724	747	799	650	651	782	745	779	849	829	790

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[1] Resident (27,749) and non-resident (1,684) deaths occurring in Arizona.

[2] Included in Yuma county prior to 1983.

TABLE 8-3

RESIDENT DEATHS BY PLACE OF OCCURRENCE AND NON-RESIDENT DEATHS OCCURRING IN ARIZONA BY COUNTY OF OCCURRENCE, ARIZONA, 1990

	PLACE OF DEATH:																	
Place of Residence	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma	Arizona Total[1]	Other State[2]	Arizona Residents, Total[3]
Apache	202	0	6	4	0	0	0	33	1	20	6	0	0	4	0	276	115	391
Cochise	1	590	1	1	6	0	0	4	0	0	180	0	0	1	0	784	13	797
Coconino	7	0	288	0	0	0	0	41	2	3	7	0	0	30	0	376	19	397
Gila	1	0	1	325	0	0	0	103	0	4	13	6	0	0	0	453	9	462
Graham	1	0	0	12	154	3	0	13	0	0	33	2	0	0	0	218	2	220
Greenlee	0	0	0	0	13	26	0	2	0	0	15	0	0	0	0	56	2	58
La Paz	0	0	0	0	0	0	62	34	14	0	2	0	0	0	3	115	17	132
Maricopa	6	6	28	16	1	0	7	15,319	14	12	53	32	0	33	3	15,531	274	15,805
Mohave	0	1	8	0	1	0	1	79	846	0	3	0	1	20	1	960	110	1,070
Navajo	17	0	38	3	0	0	0	94	0	333	8	3	0	3	0	499	22	521
Pima	1	9	2	0	0	0	1	50	3	7	5,395	16	4	4	1	5,493	78	5,571
Pinal	0	1	0	8	0	0	0	366	0	1	82	523	0	1	0	982	22	1,004
Santa Cruz	0	2	0	0	0	0	0	1	0	0	49	0	86	0	0	138	1	139
Yavapai	1	0	10	0	0	0	0	128	4	2	19	0	0	1,037	0	1,201	17	1,218
Yuma	0	0	0	0	0	0	2	38	0	1	22	2	0	1	599	665	21	686
Arizona Residents, total[4]	237	609	382	369	175	29	73	16,305	884	383	5,887	584	91	1,134	607	27,749	722	28,471
Residents of other states[5]	28	27	40	4	2	3	33	536	70	11	182	27	6	21	145	1,684		
Total Deaths:[6]	265	650	440	375	180	32	118	17,136	984	397	6,182	619	99	1,166	790	29,433		

[1] Number of deaths to residents of specified county occurring in the state.

[2] Number of deaths to residents of specified county occurring out-of-state.

[3] Total number of deaths to residents of specified county.

[4] Number of deaths occurring in specified county to residents of the state.

[5] Number of deaths occurring in specified county to out-of-state residents.

[6] Total number of deaths occurring in specified county to Arizona residents and non-residents.

TABLE 8-4

RESIDENT MORTALITY BY MONTH OF OCCURRENCE, ARIZONA, 1980-1990

	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL
1980	1,904	1,649	1,835	1,729	1,686	1,663	1,726	1,651	1,646	1,659	1,779	2,299	21,226
Percent	9.0	7.8	8.6	8.1	7.9	7.8	8.1	7.8	7.8	7.8	8.4	10.8	100.0
1981	2,098	1,666	1,856	1,828	1,742	1,642	1,774	1,715	1,612	1,747	1,765	1,873	21,318
Percent	9.8	7.8	8.7	8.6	8.2	7.7	8.3	8.0	7.6	8.2	8.3	8.8	100.0
1982	2,013	1,013	1,948	1,790	1,762	1,687	1,734	1,781	1,727	1,815	1,723	1,958	21,951
Percent	9.2	9.2	8.9	8.2	8.0	7.7	7.9	8.1	7.9	8.3	7.8	8.9	100.0
1983	1,982	1,902	1,979	1,968	1,924	1,677	1,805	1,803	1,765	1,822	1,847	2,008	22,482
Percent	8.8	8.5	8.8	8.8	8.6	7.5	8.0	8.0	7.9	8.1	8.2	8.9	100.0
1984	2,014	1,978	2,244	2,108	2,036	1,865	1,833	1,852	1,737	1,935	2,011	2,172	23,785
Percent	8.5	8.3	9.4	8.9	8.6	7.8	7.7	7.8	7.3	8.1	8.5	9.1	100.0
1985	2,314	2,201	2,110	1,966	2,017	1,956	1,952	1,874	1,919	1,958	2,042	2,268	24,577
Percent	9.4	9.0	8.6	8.0	8.2	8.0	7.9	7.6	7.8	8.0	8.3	9.2	100.0
1986	2,412	2,163	2,283	2,068	2,053	2,061	2,015	2,112	1,942	2,090	1,996	2,214	25,409
Percent	9.5	8.5	9.0	8.1	8.1	8.1	7.9	8.3	7.6	8.2	7.9	8.7	100.0
1987	2,482	2,212	2,363	2,238	2,176	2,120	2,149	2,120	1,996	2,122	2,218	2,475	26,670
Percent	9.3	8.3	8.7	8.4	8.2	7.9	8.1	7.9	7.5	8.0	8.3	9.3	100.0
1988	2,641	2,497	2,457	2,230	2,234	2,173	2,169	2,143	2,040	2,161	2,258	2,508	27,511
Percent	9.6	9.1	8.9	8.1	8.1	7.9	7.9	7.8	7.4	7.9	8.2	9.1	100.0
1989	2,789	2,443	2,543	2,260	2,264	2,071	2,191	2,069	2,123	2,212	2,301	2,572	27,838
Percent	10.0	8.8	9.1	8.1	8.1	7.4	7.9	7.4	7.6	7.9	8.3	9.2	100.0
1990	3,074	2,429	2,452	2,264	2,305	2,275	2,157	2,221	2,081	2,349	2,340	2,524	28,471
Percent	10.8	8.5	8.6	8.0	8.1	8.0	7.6	7.8	7.3	8.3	8.2	8.9	100.0

TABLE 8-5

DEATHS BY MONTH AND DAY OF OCCURRENCE, ARIZONA RESIDENTS, 1990

Day of Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
1	102	95	77	59	72	75	77	70	72	84	81	79
2	103	85	77	73	61	76	63	70	50	95	73	82
3	100	101	80	82	90	95	76	83	69	71	74	86
4	102	77	84	76	94	75	56	75	75	77	82	70
5	106	90	72	55	83	84	52	86	80	76	84	77
6	114	86	79	97	74	80	50	76	73	89	81	70
7	103	94	80	95	77	92	78	78	75	72	83	80
8	92	83	77	95	58	73	62	75	78	63	60	92
9	110	106	85	88	85	72	60	64	96	64	85	75
10	103	100	79	73	59	83	86	92	62	70	88	79
11	91	76	81	68	73	70	46	72	80	70	75	78
12	104	104	75	77	88	61	69	58	73	78	83	77
13	108	82	75	71	88	69	66	67	62	75	81	99
14	98	78	78	76	69	71	74	80	60	74	81	71
15	94	72	86	69	71	64	68	66	64	74	62	63
16	113	84	100	84	85	76	64	74	78	83	72	100
17	97	81	64	70	78	72	69	59	65	81	82	77
18	103	88	70	83	78	71	76	71	64	62	91	83
19	109	98	79	87	62	57	77	80	59	85	78	97
20	112	77	92	64	79	85	80	73	64	71	67	74
21	92	85	72	82	74	68	75	95	65	71	86	97
22	88	94	80	64	67	75	72	64	68	69	70	81
23	88	78	82	70	71	62	64	61	73	81	82	81
24	102	81	86	81	75	65	83	69	70	72	77	85
25	100	88	80	59	61	104	63	70	49	81	76	71
26	90	90	97	81	84	93	94	68	69	77	74	85
27	103	76	77	73	65	71	69	72	88	91	73	89
28	79	80	80	81	79	95	70	67	72	79	91	82
29	83		76	66	83	75	74	67	63	75	70	86
30	90		63	65	64	66	64	54	65	73	78	76
31	95		69		58		80	65		66		82
Total	3,074	2,429	2,452	2,264	2,305	2,275	2,157	2,221	2,081	2,349	2,340	2,524

TABLE 8-6

MORTALITY BY FIVE-YEAR AGE GROUPS AND COUNTY OF RESIDENCE, ARIZONA, 1990

		AGE AT DEATH																						
County/ Year	All Ages	Under 1 Day	1-6 Days	7-27 Days	28 & Over	Total Infant	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Unknown
ARIZONA	28,471	214	87	72	229	602	119	60	79	236	349	395	442	548	562	689	829	1,264	1,984	3,092	3,732	4,193	3,977	5,302	17
Apache	391	7	2	1	5	15	5	5	4	11	17	18	15	21	14	12	22	18	16	25	28	30	50	65	0
Cochise	797	4	3	0	6	13	2	0	1	6	6	8	5	13	18	14	25	53	75	91	113	103	113	137	1
Coconino	397	6	4	3	9	22	3	2	6	10	7	12	12	19	11	19	27	18	24	24	41	47	39	54	0
Gila	462	0	0	0	3	3	4	0	0	3	4	4	6	8	7	5	9	22	28	56	74	85	80	64	0
Graham	220	0	0	1	3	4	2	0	3	1	4	1	1	3	4	4	4	11	11	20	33	40	32	42	0
Greenlee	58	0	0	0	0	0	0	0	0	1	0	0	0	0	4	5	2	4	7	6	9	8	5	7	0
La Paz	132	0	0	2	1	3	0	0	0	2	1	1	4	3	3	2	5	7	10	21	17	24	14	15	0
Maricopa	15,805	139	56	37	127	359	66	30	36	137	194	235	262	285	319	369	427	671	1,051	1,622	2,027	2,370	2,256	3,085	4
Mohave	1,070	7	3	1	6	17	1	1	3	6	4	13	14	14	18	30	24	53	106	166	178	156	133	133	0
Navajo	521	5	1	4	13	23	6	3	5	12	16	13	11	20	10	16	22	33	44	55	55	60	51	66	0
Pima	5,571	28	10	14	41	93	18	10	15	26	61	65	82	121	93	124	163	235	388	623	704	810	808	1,127	5
Pinal	1,004	6	1	2	8	17	5	4	3	12	20	13	14	15	24	39	38	54	76	115	151	147	114	141	2
Santa Cruz	139	7	0	0	1	8	1	0	1	1	1	0	1	4	4	3	2	4	7	15	21	23	19	24	0
Yavapai	1,218	2	2	1	3	8	5	3	0	7	8	7	6	9	16	29	32	48	95	158	181	190	174	240	2
Yuma	686	3	5	6	3	17	1	2	2	1	6	5	9	13	17	18	27	33	46	95	100	100	89	102	3

TABLE 8-7

NUMBER OF DEATHS BY ETHNIC GROUP, GENDER AND YEAR, ARIZONA RESIDENTS, 1980-1990

Ethnicity/Gender	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
WHITE,[1] total:	17,833	17,931	18,561	19,069	20,081	20,893	21,654	22,653	23,151	23,502	24,035
Female	10,250	10,307	10,529	10,681	11,256	11,638	12,031	12,562	12,779	12,753	13,027
Male	7,583	7,624	8,032	8,338	8,825	9,255	9,623	10,091	10,372	10,749	11,008
HISPANIC,[2] total	1,798	1,804	1,750	1,794	1,965	2,002	1,962	2,193	2,400	2,331	2,418
Male	1,077	1,096	978	1,078	1,168	1,207	1,142	1,260	1,406	1,344	1,433
Female	721	708	772	716	797	795	820	933	994	987	985
BLACK,total	557	576	555	630	633	559	599	627	723	760	704
Male	332	368	350	382	360	331	366	369	417	436	408
Female	219	208	205	248	273	228	233	258	306	324	296
NATIVE AMERICAN, total	988	936	1,000	915	1,003	1,021	1,092	1,088	1,127	1,140	1,178
Male	620	598	621	574	640	625	665	671	680	680	742
Female	368	337	379	341	363	396	427	417	447	460	436
OTHER RACE, total	56	71	85	74	103	102	102	109	110	105	136
Male	34	39	50	46	59	52	63	67	71	68	76
Female	22	32	35	28	44	50	39	42	39	37	60
All Ethnic Groups, total	21,226	21,318	21,591	22,482	23,785	24,577	25,409	26,670	27,511	27,838	28,471
Male	12,313	12,408	12,527	12,761	13,483	13,853	14,267	14,929	15,353	15,281	15,686
Female	8,913	8,909	9,422	9,717	10,302	10,724	11,142	11,74	12,158	12,557	12,785

[1] Non-Hispanic.

[2] White of Hispanic origin.

TABLE 8-8

NUMBER OF DEATHS BY ETHNIC GROUP, GENDER AND COUNTY OF RESIDENCE, ARIZONA, 1990

County of Residence	Total All Ethnic Groups:			White[1]			Hispanic[2]			Black			Native American			ALL Other		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
ARIZONA	28,471	15,686	12,785	24,035	13,027	11,008	2,418	1,433	985	704	408	296	1,178	742	436	136	76	60
Apache	391	237	154	88	50	38	10	9	1	2	1	1	291	177	114	0	0	0
Cochise	797	442	355	644	360	284	133	75	58	13	6	7	2	1	1	5	0	5
Coconino	397	234	163	248	135	113	31	20	11	11	7	4	107	72	35	0	0	0
Gila	462	258	204	362	199	163	62	41	21	2	1	1	36	17	19	0	0	0
Graham	220	114	106	153	78	75	43	22	21	4	3	1	20	11	9	0	0	0
Greenlee	58	35	23	34	19	15	22	15	7	1	0	1	1	1	0	0	0	0
La Paz	132	81	51	99	60	39	7	5	2	2	1	1	22	14	8	2	1	1
Maricopa	15,805	8,530	7,275	14,009	7,426	6,583	1,041	660	381	484	277	207	193	119	74	78	48	30
Mohave	1,070	673	397	1,032	648	384	21	12	9	3	2	1	10	7	3	4	4	0
Navajo	521	335	186	263	154	109	25	15	10	7	6	1	225	160	65	1	0	1
Pima	5,571	2,966	2,605	4,572	2,422	2,150	658	348	310	137	79	58	169	98	71	35	19	16
Pinal	1,004	627	377	755	464	291	138	90	48	21	14	7	87	57	30	3	2	1
Santa Cruz	139	75	64	55	34	21	80	40	40	1	0	1	1	1	0	2	0	2
Yavapai	1,218	677	541	1,185	659	526	25	15	10	1	1	0	6	2	4	1	0	1
Yuma	686	402	284	536	319	217	122	66	56	15	10	5	8	5	3	5	2	3

[1] Non-Hispanic.
[2] White of Hispanic origin.

TABLE 8-9

DEATHS AND DEATH RATES[1] FOR SELECTED 75 CAUSES, ARIZONA AND UNITED STATES, 1990

Cause of death (Ninth Revision, International Classification of Diseases, 1975)	ARIZONA # of deaths	ARIZONA Rate	U.S. Rate
All Causes	28,471	776.8	861.9
Shigellosis and amebiasis 004,006	1	0.0	-
Certain other intestinal infections 007-009	0	-	0.2
Tuberculosis 010-018	25	0.7	0.7
Tuberculosis of respiratory system 010-012	16	0.4	0.5
Other tuberculosis 013-018	9	0.2	0.2
Whooping cough 033	2	0.1	0.0
Streptococcal sore throat, scarlatina, and erysipelas 034-035	0	-	0.0
Meningococcal infection 036	2	0.1	0.1
Septicemia 038	204	5.6	7.9
Human immunodeficiency virus (HIV) infection[2] 042*-044*	234	6.4	9.6
Acute poliomyelitis 045	0	-	-
Measles 055	1	0.0	0.0
Viral hepatitis 070	27	0.7	0.7
Syphilis 090-097	0	-	0.0
All other infectious and parasitic diseases 001-003,005,020-032,037,039-041 046-054,056-066,071-088,098-139	99	2.7	3.2
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues 140-208	6,778	184.9	201.7
Malignant neoplasms of lip, oral cavity, and pharynx 140-149	81	2.2	3.1
Malignant neoplasms of digestive organs and peritoneum 150-159	1,520	41.5	48.4
Malignant neoplasms of respiratory and intrathoracic organs 160-165	1,959	53.4	57.3
Malignant neoplasm of breast 174-175	562	15.3	18.0
Malignant neoplasms of genital organs 179-187	786	21.4	23.1
Malignant neoplasms of urinary organs 188-189	305	8.3	8.1
Malignant neoplasms of all other and unspecified sites 170-173,190-199	895	24.4	24.3
Leukemia 204-208	263	7.2	7.4
Other malignant neoplasms of lymphatic and hematopoietic tissues 200-203	407	11.1	12.0
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature 210-239	86	2.3	2.8
Diabetes mellitus 250	541	14.8	19.5
Nutritional deficiencies 260-269	41	1.1	1.2
Anemias 280-285	50	1.4	1.7
Meningitis 320-322	24	0.7	0.5
Alzheimer's disease 331.0	194	5.3	NA
Parkinson's disease 332	128	3.5	NA
Multiple sclerosis 340	25	0.7	NA
Major cardiovascular diseases 390-448	12,681	346.0	366.9
Diseases of heart 390-398,402,404-429	8,666	234.4	289.0
Rheumatic fever and rheumatic heart disease 390-398	32	0.9	2.5
Hypertensive heart disease 402	115	3.1	8.7
Hypertensive heart and renal disease 404	7	0.2	0.7
Ischemic heart disease 410-414	6,220	169.7	195.1
Acute myocardial infarction 410	2,464	67.2	96.5
Other acute and subacute forms of ischemic heart disease 411	211	5.8	1.3
Angina pectoris 413	5	0.1	0.3
Old myocardial infarction and other forms of chronic ischemic heart disease 412,414	3,540	96.6	96.9

Other diseases of endocardium	424	156	4.3	4.9
All other forms of heart disease	415-423,425-429	2,074	56.6	77.1
Hypertension with or without renal disease	401,403	102	2.8	3.7
Cerebrovascular diseases	430-438	1,738	47.4	57.9
Intracerebral and other intracranial hemorrhage	431-432	257	7.0	8.4
Cerebral thrombosis and unspecified occlusion of cerebral arteries	434.0,434.9	47	1.3	7.3
All other and late effects of cerebrovascular diseases	430,433,435-438	1,309	35.7	42.0
Atherosclerosis	440	254	6.9	6.6
Other diseases of arteries, arterioles, and capillaries	441-448	308	8.4	9.7
Acute bronchitis and bronchiolitis	466	9	0.2	0.2
Pneumonia and influenza	480-487	1,186	32.4	31.3
Pneumonia	480-486	1,166	31.8	30.6
Influenza	487	20	0.5	0.8
Chronic obstructive pulmonary diseases and allied conditions	490-496	1,582	43.2	35.5
Bronchitis, chronic and unspecified	490-491	43	1.2	1.3
Emphysema	492	344	9.4	6.6
Asthma	493	97	2.6	1.8
Other chronic obstructive pulmonary diseases and allied conditions	494-496	1,098	30.0	25.7
Ulcer of stomach and duodenum	531-533	60	1.6	2.5
Appendicitis	540-543	12	0.3	0.2
Hernia of abdominal cavity and intestinal obstruction without mention of hernia	550-553,560	59	1.6	2.2
Chronic liver disease and cirrhosis	571	429	11.7	10.2
Cholelithiasis and other disorders of gallbladder	574-575	29	0.8	1.2
Nephritis, nephrotic syndrome, and nephrosis	580-589	282	7.7	8.3
Acute glomerulonephritis and nephrotic syndrome	580-581	6	0.2	0.1
Chronic glomerulonephritis, nephritis and nephropathy, not specified as acute or chronic, and renal sclerosis, unspecified	582-583,587	7	0.2	0.6
Renal failure, disorders resulting from impaired renal function, and small kidney of unknown cause	584-586,588-589	269	7.3	7.6
Infections of kidney	590	18	0.5	0.4
Hyperplasia of prostate	600	3	0.1	0.1
Complications of pregnancy, childbirth, and the puerperium	630-676	3	0.1	0.1
Pregnancy with abortive outcome	630-638	0	-	0.0
Other complications of pregnancy, childbirth, and the puerperium	640-676	3	0.1	0.1
Congenital anomalies	740-759	231	6.3	5.3
Certain conditions originating in the perinatal period	760-779	229	6.2	7.0
Birth trauma, intrauterine hypoxia, birth asphyxia, and respiratory distress syndrome	767-769	125	3.4	1.4
Other conditions originating in the perinatal period	760-766,770-779	104	2.8	5.6
Symptoms, signs, and ill-defined conditions	780-799	260	7.1	10.5
All other diseases	Residual	2,491	68.0	69.4[3]
Accidents and adverse effects	E800-E949	1,539	42.0	37.3
Motor vehicle accidents	E810-E825	866	23.6	19.1
All other accidents and adverse effects	E800-E807,E826-E949	673	18.4	18.2
Suicide	E950-E959	692	18.9	12.3
Homicide and legal intervention	E960-E978	314	8.6	10.2
All other external causes	E980-E999	31	0.8	0.9

[1] Crude death rates. (Number of deaths per 100,000 population). The U.S. data are provisional.

[2] Beginning with data for 1987, the National Center for Health Statistics introduced category numbers 042*-044* for classifying and coding human immunodeficiency virus (HIV) infection. The asterisk indicates that these codes are not part of the Ninth Revision of the International Classification of Diseases.

[3] Includes mortality from Alzheimer's disease, Parkinson's disease and multiple sclerosis

-: Quantity zero

0.0: Quantity equal or less than 0.05

TABLE 8-10

LEADING[1] CAUSES OF MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, 1990

Cause	Arizona	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Diseases of Heart	8,666	72	263	90	156	62	17	35	4,801	336	140	1,754	309	40	385	206
Malignant Neoplasms	6,778	52	191	81	103	55	12	35	3,794	268	87	1,341	222	42	302	193
Cerebrovascular Disease	1,738	16	42	27	26	15	3	6	1,014	55	16	345	49	11	83	30
Chronic Obstructive Pulmonary Disease	1.582	5	40	9	20	13	4	6	873	69	19	351	62	4	74	33
Unintentional Injuries	1,539	84	41	55	22	10	6	11	772	58	73	265	58	5	40	39
Motor Vehicle-related	866	54	22	34	12	6	4	6	416	35	43	140	44	3	23	24
Other than Motor Vehicle	673	30	19	21	10	4	2	5	356	23	30	125	14	2	17	15
Pneumonia & Influenza	1.186	25	32	14	15	12	4	4	695	37	27	197	38	5	60	21
Suicide	692	10	21	12	14	0	0	5	386	27	16	119	34	1	35	12
Infectious & Parasitic Diseases[2]	597	12	18	9	4	5	1	3	364	9	9	114	13	3	18	15
HIV Infection	234	0	3	2	1	1	1	1	172	1	0	42	1	0	6	3
Alcoholism	330	12	8	10	11	4	0	2	134	15	19	81	16	1	8	9
Homicide	314	14	2	4	3	1	0	3	189	10	7	51	15	0	12	3
Other Diseases of the Arteries	308	1	11	3	12	4	0	0	166	17	3	57	9	2	19	4
Symptoms and Ill-Defined Conditions	260	14	6	8	3	6	1	1	127	10	13	40	18	0	6	7
Atherosclerosis	254	2	4	0	5	1	0	1	123	21	2	57	8	0	18	12
Congenital Anomalies	231	4	10	7	2	1	1	0	140	5	9	36	4	4	5	4
Perinatal Conditions	229	7	3	8	1	0	0	1	151	7	5	23	7	6	1	9
All Other Causes	3,226	53	78	50	56	27	7	14	1,806	106	58	651	102	13	131	74
ALL CAUSES	28,471	391	797	397	462	220	58	132	15,805	1,070	521	5,571	1,004	139	1,218	686

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[1] Leading causes are those causes with the greatest number of deaths statewide in 1990.

[2] Beginning in January 1987, includes data for the category numbers 042-044 (HIV infection), following the redefinition by the National Center for Health Statistics.

TABLE 8-11

RATES[1] FOR THE LEADING CAUSES OF MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, UNITED STATES, 1990

Cause	U.S.[2]	Arizona	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Diseases of Heart	289.0	236.4	116.9	269.4	93.2	387.9	233.5	212.3	252.8	226.2	359.4	180.3	263.0	265.5	134.8	357.4	192.7
Malignant Neoplasms	201.7	184.9	84.4	195.7	83.9	256.1	207.1	149.9	252.8	178.8	286.6	112.0	201.1	190.8	141.5	280.4	180.6
Cerebrovascular Disease	57.9	47.4	26.0	43.0	28.0	64.7	56.5	37.5	43.3	47.8	58.8	20.6	51.7	42.1	37.1	77.1	28.1
Chronic Obstructive Pulmonary Disease	35.5	43.2	8.7	41.0	9.3	49.7	49.0	50.0	43.3	41.4	73.8	24.5	52.6	53.3	13.5	68.7	30.9
Unintentional Injuries	37.3	42.0	136.4	42.0	56.9	54.7	37.7	74.9	79.5	36.4	62.0	94.0	39.7	49.8	16.8	37.1	36.5
Motor Vehicle-related	19.1	23.6	87.7	22.5	35.2	29.8	22.6	50.0	43.3	19.6	37.4	55.4	21.0	37.8	10.1	21.4	22.5
Other than Motor Vehicle	18.2	18.4	48.7	19.5	21.7	24.9	15.1	25.0	36.1	16.8	24.6	38.6	18.7	12.0	6.7	15.8	14.0
Pneumonia & Influenza	31.3	32.4	40.6	32.8	14.5	37.3	45.2	50.0	28.9	32.8	39.6	34.8	29.5	32.7	16.8	55.7	19.7
Suicide	12.3	18.9	16.2	21.5	12.4	34.8	-	-	36.1	18.2	28.9	20.6	17.8	29.2	3.4	32.5	11.2
Infectious & Parasitic Diseases	23.1	16.3	19.5	18.4	9.3	10.0	18.8	12.5	21.7	17.2	9.6	11.6	17.1	11.2	10.1	16.7	14.0
HIV Infection	9.6	6.4	-	3.1	2.1	2.5	3.8	12.5	7.2	9.1	1.1	-	6.3	0.9	-	5.6	2.8
Alcoholism	NA	9.0	19.5	9.2	10.4	27.4	15.1	-	14.5	6.3	16.0	24.5	12.1	13.7	3.4	7.4	8.4
Homicide	10.2	8.6	22.7	2.1	4.1	7.5	3.8	-	21.7	8.9	10.7	9.0	7.7	12.9	-	11.1	2.8
Other Diseases of the Arteries	9.7	8.4	6.2	11.3	3.1	29.8	15.1	-	-	7.8	18.2	3.9	8.5	7.7	6.7	17.6	3.7
Symptoms and Ill-Defined Conditions	10.5	7.1	22.7	6.1	8.3	7.5	22.6	12.5	7.2	6.0	10.7	16.7	6.0	15.5	-	5.6	6.5
Atherosclerosis	6.6	6.9	3.3	4.1	-	12.4	3.8	-	7.2	5.8	22.5	2.6	8.5	6.9	-	16.7	11.2
Congenital Anomalies	5.3	6.3	6.5	10.2	7.2	5.0	3.8	12.5	-	6.6	5.3	11.6	5.4	3.4	13.5	4.6	3.7
Perinatal Conditions	7.0	6.2	7.1	3.1	8.3	2.5	-	-	7.2	7.1	7.5	6.4	3.4	6.0	20.2	0.9	8.4
All Other Causes	135.0	88.0	86.1	79.9	51.8	139.2	101.7	87.4	101.0	85.1	113.4	74.7	97.6	87.6	43.8	121.6	69.2
ALL CAUSES	861.9	776.8	634.8	816.4	411.0	1,148.8	828.5	724.3	953.5	744.8	1,144.4	670.9	835.4	862.7	468.4	1,130.8	641.8

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[1] Crude death rates. (Number of deaths per 100,000 population).

[2] Provisional.

TABLE 8-12

PERCENT OF TOTAL DEATHS FOR THE LEADING CAUSES OF MORTALITY BY COUNTY OF RESIDENCE, ARIZONA, UNITED STATES, 1990

Cause/Year	U.S.[1]	Arizona	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
Diseases of Heart	33.5	30.4	18.4	33.0	22.7	33.8	28.2	29.3	26.5	30.4	31.4	26.9	31.5	30.8	28.8	31.6	30.0
Malignant Neoplasms	23.4	23.8	13.3	24.0	20.4	22.3	25.0	20.7	26.5	24.0	25.0	16.7	24.1	22.1	30.2	24.8	28.1
Cerebrovascular Disease	6.7	6.1	4.1	5.3	6.8	5.6	6.8	5.2	4.5	6.4	5.1	3.1	6.2	4.9	7.9	6.8	4.4
Chronic Obstructive Pulmonary Disease	4.1	5.6	1.3	5.0	2.3	4.3	5.9	6.9	4.5	5.5	6.4	3.6	6.3	6.2	2.9	6.1	4.8
Unintentional Injuries	4.3	5.4	21.5	5.1	13.9	4.8	4.5	10.3	8.3	4.9	5.4	14.0	4.8	5.8	3.6	3.3	5.7
Motor Vehicle-related	2.2	3.0	13.8	2.8	8.6	2.6	2.7	6.9	4.5	2.6	3.3	8.3	2.5	4.4	2.2	1.9	3.5
Other than Motor Vehicle	2.1	2.4	7.7	2.4	5.3	2.2	1.8	3.4	3.8	2.3	2.1	5.8	2.2	1.4	1.4	1.4	2.2
Pneumonia & Influenza	3.6	4.2	6.4	4.0	3.5	3.2	5.5	6.9	3.0	4.4	3.5	5.2	3.5	3.8	3.6	4.9	3.1
Suicide	1.4	2.4	2.6	2.6	3.0	3.0		-	3.8	2.4	2.5	3.1	2.1	3.4	0.7	2.9	1.7
Diabetes	2.3	1.9	2.0	3.4	2.5	1.9	1.8	5.2	3.8	1.7	1.9	3.5	1.6	4.0	1.4	1.7	2.2
Infectious & Parasitic Diseases	2.7	2.1	3.1	2.3	2.3	0.9	2.3	1.7	2.3	2.3	0.8	1.7	2.0	1.3	2.2	1.5	2.2
HIV Infection	1.1	0.8	-	0.4	0.5	0.2	0.5	1.7	0.8	1.1	0.3	-	0.8	0.1	-	0.5	0.4
Alcoholism	NA	1.2	3.1	1.0	2.5	2.4	1.8		1.5	0.8	1.4	3.6	1.5	1.6	0.7	0.7	1.3
Homicide	1.2	1.1	3.6	0.3	1.0	0.6	0.5		2.3	1.7	0.9	1.3	0.9	1.5	-	1.0	0.4
Atherosclerosis	0.8	0.9	0.5	0.5	-	1.1	0.5		0.8	0.8	2.0	0.4	1.0	0.8	-	1.5	1.7
Other Diseases of the Arteries	1.1	1.1	0.3	1.4	0.8	2.6	1.8	-		1.1	1.6	0.6	1.0	0.9	1.4	1.6	0.6
Perinatal Conditions	0.8	0.8	1.8	0.4	2.0	0.2	-		0.8	1.0	0.7	1.0	0.4	0.7	4.3	0.1	1.3
Symptoms and Ill-Defined Conditions	1.2	0.9	3.6	0.8	2.0	0.6	2.7	1.7	0.8	0.8	0.9	2.5	0.7	1.8	-	0.5	1.0
Congenital Anomalies	0.6	0.8	1.0	1.3	1.8	0.4	0.5	1.7	-	0.9	0.5	1.7	0.6	0.4	2.9	0.4	0.6
All Other Causes	12.3	11.3	13.6	9.8	12.6	12.1	12.3	12.1	10.6	11.4	9.9	11.1	11.7	10.2	9.4	10.8	10.8
ALL CAUSES	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Provisional

TABLE 8-13

FIVE LEADING CAUSES[1] OF DEATH AMONG CHILDREN (1-14 YEARS) BY ETHNICITY IN ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
WHITE[2]					
Unintentional injuries	82	Unintentional injuries	82	Unintentional injuries	54
Motor vehicle-related	35	Motor vehicle-related	42	Motor vehicle related	28
Drowning	26	Drowning	17	Drowning	16
Other than motor vehicle	21	Other than motor vehicle	23	Other than motor vehicle	10
Malignant neoplasms	24	Malignant neoplasms	16	Malignant neoplasms	15
Infectious diseases	12	Infectious diseases	5	Congenital anomalies	12
Congenital anomalies	11	Homicide	5	Homicide	8
Pneumonia & influenza	11	Pneumonia & influenza	3	Infectious diseases	5
ALL DEATHS	208	ALL DEATHS	168	ALL DEATHS	130
HISPANIC					
Unintentional injuries	37	Unintentional injuries	29	Unintentional injuries	22
Motor vehicle-related	24	Motor vehicle-related	15	Motor vehicle related	20
Drowning	8	Drowning	13	Drowning	1
Other than motor vehicle	5	Other than motor vehicle	1	Other than motor vehicle	1
Infectious diseases	9	Homicide	7	Congenital anomalies	6
Pneumonia & influenza	5	Congenital anomalies	3	Pneumonia & influenza	4
Malignant neoplasms	5	Malignant neoplasms	2	Malignant neoplasms	4
Congenital anomalies	3	Pneumonia & influenza	2	Infectious diseases	3
ALL DEATHS	78	ALL DEATHS	56	ALL DEATHS	54
BLACK					
Unintentional injuries	4	Unintentional injuries	4	Unintentional injuries	7
Motor vehicle-related	0	Motor vehicle-related	3	Motor vehicle related	5
Drowning	3	Drowning	1	Drowning	1
Other than motor vehicle	1	Other than motor vehicle	1	Other than motor vehicle	1
Congenital anomalies	3	Congenital anomalies	1	Infectious diseases	2
Homicide	1	Malignant neoplasms	1	Malignant neoplasms	1
Pneumonia & influenza	1	Chronic obstructive pulmonary disease	1	Homicide	1
ALL DEATHS	13	ALL DEATHS	9	ALL DEATHS	15
NATIVE AMERICAN					
Unintentional injuries	29	Unintentional injuries	14	Unintentional injuries	31
Motor vehicle-related	16	Motor vehicle-related	10	Motor vehicle related	18
Drowning	5	Drowning	0	Drowning	2
Other than motor vehicle	8	Other than motor vehicle	4	Other than motor vehicle	11
Infectious diseases	6	Diseases of heart	3	Homicide	6
Pneumonia & influenza	5	Malignant neoplasms	3	Congenital anomalies	3
Congenital anomalies	2	Homicide	2	Infectious diseases	2
Malignant neoplasms	1	Congenital anomalies	2	Malignant neoplasms	2
ALL DEATHS	60	ALL DEATHS	35	ALL DEATHS	57
ALL ETHNIC GROUPS:[3]					
Unintentional injuries	152	Unintentional injuries	132	Unintentional injuries	116
Motor vehicle-related	75	Motor vehicle-related	73	Motor vehicle related	72
Drowning	37	Drowning	31	Drowning	21
Other than motor vehicle	40	Other than motor vehicle	28	Other than motor vehicle	23
Malignant neoplasms	31	Malignant neoplasms	22	Malignant neoplasms	22
Infectious diseases	27	Congenital anomalies	15	Congenital anomalies	21
Pneumonia & influenza	22	Homicide	14	Homicide	17
Congenital anomalies	20	Infectious diseases	8	Infectious diseases	12
ALL DEATHS	357	ALL DEATHS	273	ALL DEATHS	258

[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.

[2] Includes only whites of non-Hispanic origin.

[3] Includes other ethnic groups.

TABLE 8-14

FIVE LEADING CAUSES[1] OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY ETHNICITY IN ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
		WHITE[2]			
Unintentional injuries	82	Unintentional injuries	93	Unintentional injuries	75
Motor vehicle-related	56	Motor vehicle-related	74	Motor vehicle-related	54
Other than motor vehicle	26	Other than motor vehicle	19	Other than motor vehicle	21
Suicide	13	Suicide	23	Suicide	30
Malignant neoplasms	12	Homicide	13	Homicide	11
Homicide	6	Malignant neoplasms	8	Malignant neoplasms	7
Congenital anomalies	3	Diseases of heart	4	Diseases of heart	4
ALL DEATHS	142	ALL DEATHS	178	ALL DEATHS	142
		HISPANIC			
Unintentional injuries	23	Unintentional injuries	25	Unintentional injuries	21
Motor vehicle-related	15	Motor vehicle-related	20	Motor vehicle-related	18
Other than motor vehicle	8	Other than motor vehicle	5	Other than motor vehicle	3
Diseases of heart	3	Homicide	11	Homicide	13
Malignant neoplasms	2	Suicide	5	Suicide	3
Homicide	2	Malignant neoplasms	4	Malignant neoplasms	1
Congenital anomalies	2	Infectious diseases	1	Diabetes	1
ALL DEATHS	47	ALL DEATHS	54	ALL DEATHS	44
		BLACK			
Unintentional injuries	3	Unintentional injuries	9	Unintentional injuries	4
Motor vehicle-related	3	Motor vehicle-related	6	Motor vehicle-related	4
Other than motor vehicle	0	Other than motor vehicle	3	Other than motor vehicle	0
Homicide	1	Homicide	5	Homicide	2
		Suicide	1	Suicide	1
ALL DEATHS	4	ALL DEATHS	17	ALL DEATHS	7
		NATIVE AMERICAN			
Unintentional injuries	28	Unintentional injuries	21	Unintentional injuries	24
Motor vehicle-related	20	Motor vehicle-related	16	Motor vehicle-related	16
Other than motor vehicle	8	Other than motor vehicle	5	Other than motor vehicle	8
Homicide	4	Homicide	5	Suicide	8
Suicide	3	Suicide	5	Homicide	2
Infectious diseases	3	Malignant neoplasms	2	Diseases of heart	2
Diseases of heart	1			Malignant neoplasms	1
ALL DEATHS	44	ALL DEATHS	39	ALL DEATHS	42
		ALL ETHNIC GROUPS[3]			
Unintentional injuries	136	Unintentional injuries	149	Unintentional injuries	124
Motor vehicle-related	94	Motor vehicle-related	117	Motor vehicle-related	92
Other than motor vehicle	42	Other than motor vehicle	32	Other than motor vehicle	32
Suicide	16	Suicide	34	Suicide	42
Malignant neoplasms	15	Homicide	34	Homicide	28
Homicide	13	Malignant neoplasms	14	Malignant neoplasms	9
Diseases of heart	5	Diseases of heart	4	Diseases of heart	6
ALL DEATHS	237	ALL DEATHS	289	ALL DEATHS	236

[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 8-15

FIVE LEADING CAUSES[1] OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY ETHNICITY IN ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
		WHITE[2]			
Unintentional injuries	215	Unintentional injuries	346	Unintentional injuries	401
Motor vehicle-related	168	Motor vehicle-related	294	Motor vehicle related	240
Other than motor vehicle	47	Other than motor vehicle	52	Other than motor vehicle	161
Malignant neoplasms	137	Suicide	172	Suicide	267
Diseases of heart	85	Malignant neoplasms	168	Malignant neoplasms	226
Suicide	83	Diseases of heart	105	HIV infection	150
Homicide	43	Homicide	93	Diseases of heart	122
ALL DEATHS	877	ALL DEATHS	1,204	ALL DEATHS	1,536
		HISPANIC			
Unintentional injuries	81	Unintentional injuries	81	Unintentional injuries	113
Motor vehicle-related	62	Motor vehicle-related	70	Motor vehicle related	72
Other than motor vehicle	19	Other than motor vehicle	11	Other than motor vehicle	41
Malignant neoplasms	25	Homicide	37	Homicide	53
Homicide	21	Suicide	29	Malignant neoplasms	47
Diseases of heart	14	Malignant neoplasms	18	Suicide	36
Suicide	12	Diseases of heart	16	HIV infection	22
ALL DEATHS	228	ALL DEATHS	236	ALL DEATHS	360
		BLACK			
Homicide	25	Homicide	12	Homicide	28
Diseases of heart	10	Malignant neoplasms	10	Unintentional injury	15
Unintentional injuries	7	Unintentional injuries	10	Motor vehicle related	6
Motor vehicle-related	6	Motor vehicle-related	6	Other than motor vehicle	9
Other than motor vehicle	1	Other than motor vehicle	4	Suicide	13
Malignant neoplasms	6	Diseases of heart	6	Diseases of heart	10
Cerebrovascular disease	3	Suicide	5	HIV infection	9
ALL DEATHS	81	ALL DEATHS	65	ALL DEATHS	101
		NATIVE AMERICAN			
Unintentional injuries	79	Unintentional injuries	88	Unintentional injuries	127
Motor vehicle-related	65	Motor vehicle-related	70	Motor vehicle related	88
Other than motor vehicle	14	Other than motor vehicle	18	Other than motor vehicle	39
Alcoholism	26	Alcoholism	44	Alcoholism	35
Homicide	11	Suicide	21	Suicide	26
Suicide	10	Homicide	20	Homicide	24
Malignant neoplasms	8	Diseases of heart	10	Diseases of heart	11
ALL DEATHS	208	ALL DEATHS	253	ALL DEATHS	274
		ALL ETHNIC GROUPS:[3]			
Unintentional injuries	382	Unintentional injuries	527	Unintentional injuries	662
Motor vehicle-related	301	Motor vehicle-related	441	Motor vehicle related	412
Other than motor vehicle	81	Other than motor vehicle	86	Other than motor vehicle	250
Malignant neoplasms	177	Suicide	230	Suicide	346
Diseases of heart	115	Malignant neoplasms	204	Malignant neoplasms	288
Suicide	107	Homicide	163	Homicide	191
Homicide	100	Diseases of heart	137	HIV infection	183
ALL DEATHS	1,398	ALL DEATHS	1,768	ALL DEATHS	2,296

[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 8-16

FIVE LEADING CAUSES[1] OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS) BY ETHNICITY IN ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
WHITE[2]					
Diseases of heart	996	Malignant neoplasms	1,278	Malignant neoplasms	1,349
Malignant neoplasms	727	Diseases of heart	1,236	Diseases of heart	1,028
Cerebrovascular disease	158	Chronic obstructive		Chronic obstructive	
Chronic obstructive		pulmonary disease	238	pulmonary disease	207
pulmonary disease	152	Cerebrovascular disease	156	Unintentional injuries	181
Unintentional injuries	144	Unintentional injuries	121	Motor vehicle-related	105
Motor vehicle-related	106	Motor vehicle-related	90	Other than motor vehicle	76
Other than motor vehicle	38	Other than motor vehicle	31	Suicide	136
ALL DEATHS	3,068	ALL DEATHS	3,873	ALL DEATHS	3,801
HISPANIC					
Diseases of heart	122	Malignant neoplasms	111	Malignant neoplasms	160
Malignant neoplasms	71	Diseases of heart	106	Diseases of heart	119
Alcoholism	33	Unintentional injuries	33	Unintentional injuries	41
Cerebrovascular disease	28	Motor vehicle-related	24	Motor vehicle-related	26
Unintentional injuries	25	Other than motor vehicle	9	Other than motor vehicle	15
Motor vehicle-related	19	Alcoholism	30	Diabetes	26
Other than motor vehicle	6	Cerebrovascular disease	20	Alcoholism	17
ALL DEATHS	412	ALL DEATHS	434	ALL DEATHS	506
BLACK					
Diseases of heart	37	Diseases of heart	48	Diseases of heart	48
Malignant neoplasms	28	Malignant neoplasms	35	Malignant neoplasms	45
Cerebrovascular disease	16	Homicide	9	Unintentional injuries	9
Diabetes	12	Cerebrovascular disease	8	Motor vehicle-related	7
Alcoholism	10	Alcoholism	6	Other than motor vehicle	2
				Alcoholism	7
				Chronic obstructive	
				pulmonary disease	6
ALL DEATHS	158	ALL DEATHS	146	ALL DEATHS	152
NATIVE AMERICAN					
Diseases of heart	27	Diseases of heart	34	Diseases of heart	55
Alcoholism	25	Alcoholism	28	Malignant neoplasms	43
Unintentional injuries	24	Unintentional injuries	22	Unintentional injuries	32
Motor vehicle-related	17	Motor vehicle-related	18	Motor vehicle-related	22
Other than motor vehicle	7	Other than motor vehicle	4	Other than motor vehicle	10
Malignant neoplasms	16	Malignant neoplasms	21	Diabetes	27
Pneumonia and influenza	11	Diabetes	14	Alcoholism	24
ALL DEATHS	192	ALL DEATHS	207	ALL DEATHS	276
ALL ETHNIC GROUPS[3]					
Diseases of heart	1,184	Malignant neoplasms	1,449	Malignant neoplasms	1,608
Malignant neoplasms	843	Diseases of heart	1,427	Diseases of heart	1,253
Cerebrovascular disease	211	Chronic obstructive		Unintentional injuries	246
Alcoholism	208	pulmonary disease	249	Motor vehicle-related	160
Unintentional injuries	195	Cerebrovascular disease	192	Other than motor vehicle	104
Motor vehicle-related	143	Unintention injuries	181	Chronic obstructive	
Other than motor vehicle	52	Motor vehicle-related	134	pulmonary disease	224
		Other than motor vehicle	47	Alcoholism	157
ALL DEATHS	3,836	ALL DEATHS	4,672	ALL DEATHS	4,766

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[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 8-17

FIVE LEADING CAUSES[1] OF DEATH AMONG ELDERLY (65 YEARS AND OLDER) BY ETHNICITY IN ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
WHITE[2]					
Diseases of heart	2,897	Diseases of heart	4,951	Diseases of heart	6,520
Malignant neoplasms	1,145	Malignant neoplasms	2,490	Malignant neoplasms	4,390
Cerebrovascular disease	904	Cerebrovascular disease	1,069	Cerebrovascular disease	1,406
Chronic obstructive pulmonary disease	338	Chronic obstructive pulmonary disease	764	Chronic obstructive pulmonary disease	1,269
Pneumonia and influenza	239	Pneumonia and influenza	444	Pneumonia and influenza	933
ALL DEATHS	6,960	ALL DEATHS	12,015	ALL DEATHS	18,119
HISPANIC					
Diseases of heart	271	Diseases of heart	334	Diseases of heart	440
Malignant neoplasms	110	Malignant neoplasms	164	Malignant neoplasms	295
Cerebrovascular disease	83	Cerebrovascular disease	76	Cerebrovascular disease	92
Pneumonia and influenza	28	Pneumonia and influenza	42	Diabetes	65
Diabetes	26	Diabetes	33	Pneumonia and influenza	58
ALL DEATHS	712	ALL DEATHS	881	ALL DEATHS	1,285
BLACK					
Diseases of heart	76	Diseases of heart	103	Diseases of heart	133
Malignant neoplasms	36	Malignant neoplasms	48	Malignant neoplasms	91
Cerebrovascular disease	21	Cerebrovascular disease	24	Cerebrovascular disease	33
Pneumonia and influenza	12	Diabetes	14	Pneumonia and influenza	14
Diabetes	11	Pneumonia and influenza	9	Diabetes	12
ALL DEATHS	202	ALL DEATHS	273	ALL DEATHS	373
NATIVE AMERICAN					
Diseases of heart	51	Diseases of heart	96	Diseases of heart	115
Pneumonia and influenza	31	Malignant neoplasms	38	Malignant neoplasms	60
Unintentional injuries	27	Pneumonia and influenza	39	Pneumonia and influenza	49
Cerebrovascular disease	23	Diabetes	30	Diabetes	41
Malignant neoplasms	15	Unintentional injuries	29	Cerebrovascular disease	26
ALL DEATHS	239	ALL DEATHS	371	ALL DEATHS	455
ALL ETHNIC GROUPS[3]					
Diseases of heart	3,386	Diseases of heart	5,509	Diseases of heart	7,229
Malignant neoplasms	1,335	Malignant neoplasms	2,742	Malignant neoplasms	4,849
Cerebrovascular disease	1,070	Cerebrovascular disease	1,184	Cerebrovascular disease	1,563
Chronic obstructive pulmonary disease	373	Chronic obstructive pulmonary disease	810	Chronic obstructive pulmonary disease	1,335
Pneumonia and influenza	327	Pneumonia and influenza	534	Pneumonia and influenza	1,060
ALL DEATHS	8,349	ALL DEATHS	13,580	ALL DEATHS	20,296

[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 8-18

FIVE LEADING CAUSES[1] OF DEATH BY ETHNICITY, (ALL AGES), ARIZONA IN 1970, 1980, AND 1990

1970 Causes of death	# of deaths	1980 Causes of death	# of deaths	1990 Causes of death	# of deaths
WHITE[2]					
Diseases of heart	4,071	Diseases of heart	6,314	Diseases of heart	7,682
Malignant neoplasms	2,072	Malignant neoplasms	3,963	Malignant neoplasms	5,988
Cerebrovascular disease	1,120	Cerebrovascular disease	1,255	Chronic obstructive pulmonary disease	1,493
Unintentional injuries	858	Unintentional injuries	1,052	Cerebrovascular disease	1,533
Chronic obstructive pulmonary disease	510	Chronic obstructive pulmonary disease	1,022	Unintentional injuries	1,013
ALL DEATHS	11,849	ALL DEATHS	17,833	ALL DEATHS	24,035
HISPANIC					
Diseases of heart	414	Diseases of heart	457	Diseases of heart	582
Unintentional injuries	215	Malignant neoplasms	300	Malignant neoplasms	508
Malignant neoplasms	214	Unintentional injuries	223	Unintentional injuries	227
Cerebrovascular disease	126	Cerebrovascular disease	101	Cerebrovascular disease	115
Pneumonia & influenza	70	Homicide	69	Diabetes	96
ALL DEATHS	1,623	ALL DEATHS	1,798	ALL DEATHS	2,418
BLACK					
Diseases of heart	123	Diseases of heart	157	Diseases of heart	192
Malignant neoplasms	70	Malignant neoplasms	94	Malignant neoplasms	142
Cerebrovascular disease	41	Unintentional injuries	36	Unintentional injuries	45
Homicide	36	Cerebrovascular disease	33	Cerebrovascular disease	39
Unintentional injuries	34	Homicide	30	Homicide	37
ALL DEATHS	495	ALL DEATHS	557	ALL DEATHS	704
NATIVE AMERICAN					
Unintentional injuries	232	Unintentional injuries	204	Unintentional injuries	241
Diseases of heart	88	Diseases of heart	146	Diseases of heart	186
Pneumonia & influenza	63	Alcoholism	80	Malignant neoplasms	113
Alcoholism	54	Malignant neoplasms	71	Diabetes	71
Malignant neoplasms	42	Pneumonia & influenza	58	Alcoholism	68
ALL DEATHS	859	ALL DEATHS	988	ALL DEATHS	1,178
ALL ETHNIC GROUPS:[3]					
Diseases of heart	4,704	Diseases of heart	7,094	Diseases of heart	8,666
Malignant neoplasms	2,405	Malignant neoplasms	4,434	Malignant neoplasms	6,778
Cerebrovascular disease	1,324	Cerebrovascular disease	1,415	Cerebrovascular disease	1,738
Unintentional injuries	1,023	Unintentional injuries	1,151	Chronic obstructive pulmonary disease	1,582
Chronic obstructive pulmonary disease	565	Chronic obstructive pulmonary disease	1,080	Unintentional injuries	1,539
ALL DEATHS	14,857	ALL DEATHS	21,226	ALL DEATHS	28,471

[1] Leading causes are those with the greatest number of deaths in 1970, 1980, and 1990.
[2] Includes only whites of non-Hispanic origin.
[3] Includes other ethnic groups.

TABLE 8-19

MORTALITY RATES[1] BY COUNTY OF RESIDENCE AND YEAR, ARIZONA, UNITED STATES, 1980-1990

Residence	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	878.3	862.4	852.0	862.8	862.3	873.9	873.2	874.0	883.0	868.1[2]	861.9[2]
ARIZONA	781.0	761.4	760.4	765.4	774.5	768.5	758.0	768.8	765.4	747.7	776.8
Apache	579.8	575.2	569.1	516.7	587.5	585.7	587.3	549.8	511.0	518.2	634.8
Cochise	727.7	706.4	717.1	781.6	728.1	713.5	678.3	762.1	730.3	715.3	816.4
Coconino	412.3	384.0	407.0	392.2	413.9	440.9	430.6	426.8	426.1	395.0	411.0
Gila	890.0	893.9	1,091.6	987.2	1,045.4	999.9	1,005.0	1,017.0	1,019.7	1,038.4	1,148.8
Graham	748.0	793.1	686.2	760.3	728.7	724.8	770.4	781.9	800.7	861.2	828.5
Greenlee	754.0	429.8	557.3	508.3	580.4	542.0	522.1	696.8	671.5	517.4	724.3
La Paz[3]	NA	NA	NA	1,076.9	1,144.5	944.6	907.8	1,067.9	1,098.4	996.1	953.5
Maricopa	780.4	768.0	762.0	761.3	773.9	758.9	737.9	740.7	735.4	720.0	744.8
Mohave	985.8	966.5	1,071.8	995.0	931.0	1,037.4	1,027.5	1,106.2	1,194.1	1,190.8	1,144.4
Navajo	612.9	598.0	565.0	562.3	603.2	636.1	654.3	610.5	607.4	636.9	670.9
Pima	811.5	771.6	753.5	774.9	784.7	779.2	791.6	803.4	782.5	748.8	835.4
Pinal	804.0	795.9	780.0	809.5	826.4	783.9	907.6	860.4	923.7	942.6	862.7
Santa Cruz	591.4	589.6	613.6	590.1	667.4	546.1	533.6	545.1	640.3	556.5	468.4
Yavapai	1,175.4	1,166.4	1,217.8	1,305.7	1,187.2	1,201.3	1,125.4	1,276.5	1,242.3	1,241.8	1,130.8
Yuma	773.0	749.5	777.7	711.3	686.2	798.0	758.5	758.0	818.2	764.1	641.8

[1] Crude death rates. (Number of deaths per 100,000 population).
[2] Preliminary.
[3] Included in Yuma County prior to 1983.

TABLE 8-20

NUMBER OF DEATHS FOR THE LEADING CAUSES[1] OF MORTALITY IN ARIZONA BY YEAR, 1980 - 1990

CAUSE OF DEATH	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Diseases of Heart[2]	7,094	7,232	7,624	7,626	7,757	7,967	8,050	8,533	8,695	8,652	8,666
Malignant Neoplasms[3]	4,434	4,570	4,809	5,019	5,273	5,570	5,808	6,126	6,269	6,351	6,778
Unintentional Injuries, total	1,523	1,541	1,366	1,310	1,486	1,457	1,563	1,567	1,624	1,512	1,539
Motor Vehicle-Related[4]	886	902	713	685	856	864	936	912	896	821	866
Other than Motor Vehicle[5]	637	639	653	625	630	593	627	655	728	691	673
Cerebrovascular Disease	1,415	1,367	1,397	1,464	1,550	1,449	1,497	1,512	1,521	1,617	1,738
Chronic Obstructive Pulmonary Disease	1,080	1,014	1,058	1,116	1,258	1,312	1,429	1,425	1,459	1,563	1,582
Influenza and Pneumonia	673	616	618	588	779	779	880	868	1,014	1,079	1,186
Suicide	462	464	507	513	533	567	624	687	666	669	692
Diabetes	351	337	363	440	425	452	447	482	534	610	541
Infectious & Parasitic Diseases[6]	222	271	275	266	283	333	322	454	512	576	597
HIV Infection	NA	NA	NA	NA	NA	NA	NA	111	161	199	234
Alcoholism	325	318	323	299	338	333	276	294	350	334	330
Homicide	288	281	263	253	268	256	335	287	338	327	314
Atherosclerosis	242	262	267	285	301	318	296	319	316	248	254
Other Diseases of the Arteries	234	245	252	267	233	240	265	305	299	333	308
Perinatal Conditions	300	249	184	190	204	203	229	258	256	232	229
Congenital Anomalies	188	213	180	195	199	211	188	208	232	237	231
All Other Causes	2,595	2,338	2,465	2,651	2,898	3,130	3,200	3,345	4,026	3,498	3,226
TOTAL, ALL CAUSES	21,226	21,318	21,951	22,482	23,785	24,577	25,409	26,670	27,511	27,838	28,471

[1] Leading causes are those with the greatest number of deaths for the 1980 to 1990 period.
[2] See Table 8-21 for more detail.
[3] See Table 8-22 for more detail.
[4] See Table 8-23 for more detail.
[5] See Table 8-24 for more detail.
[6] Beginning in January 1987, includes data for the category numbers 042-044 (HIV infection), following the redefinition by the National Center for Health Statistics.

TABLE 8-21

NUMBER OF DEATHS FROM DISEASES OF THE HEART BY CAUSE, GENDER AND YEAR, ARIZONA, 1980-1990

Cause/Gender	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
DISEASES OF HEART, TOTAL	7,094	7,232	7,624	7,626	7,757	7,967	8,050	8,533	8,695	8,652	8,666
MALE	4,127	4,168	4,331	4,327	4,403	4,423	4,494	4,770	4,749	4,709	4,676
FEMALE	2,967	3,064	3,293	3,299	3,354	3,544	3,556	3,764	3,946	3,943	3,990
Rheumatic Fever and Rheumatic Heart Disease	98	102	104	64	81	97	68	86	79	74	94
Male	32	35	35	26	26	29	21	32	21	20	19
Female	66	67	69	38	55	68	47	54	58	54	75
Hypertensive Heart Disease/ Hypertensive Heart & Renal Disease	154	131	172	145	136	123	142	174	150	117	122
Male	83	74	89	67	58	54	65	87	69	5	46
Female	71	57	83	78	78	69	77	87	81	66	76
Acute Myocardial Infarction	2,551	2,580	2,803	2,754	2,579	2,539	2,521	2,598	2,672	2,504	2,464
Male	1,631	1,602	1,687	1,644	1,576	1,593	1,548	1,584	1,534	1,439	1,393
Female	920	978	1,116	1,110	1,003	946	973	1,014	1,138	1,065	1,071
Coronary Atherosclerosis	2,098	2,068	2,039	2,164	2,229	2,022	2,062	2,232	2,369	2,359	2,251
Male	1,094	1,101	1,063	1,145	1,135	997	1,062	1,142	1,247	1,233	1,184
Female	1,004	967	976	1,019	1,094	1,025	1,000	1,090	1,122	1,126	1,067
Other Forms of Ischemic Heart Disease	805	819	782	835	964	1,127	1,144	1,213	1,229	1,413	1,505
Male	569	575	563	563	686	762	749	787	784	878	913
Female	236	244	219	272	278	365	395	426	445	535	592
Cardiac Arrest	170	217	213	224	206	249	302	305	329	358	274
Male	103	118	121	125	112	127	150	154	179	180	150
Female	67	99	92	99	94	122	152	151	150	178	124
Heart Failure	275	257	352	271	376	416	381	370	415	447	497
Male	144	126	174	137	193	193	188	183	207	199	220
Female	131	131	178	134	183	223	193	187	208	248	277
All Other Forms of Heart Disease	943	1,058	1,159	1,169	1,186	1,394	1,430	1,555	1,452	1,380	1,459
Male	471	537	599	620	617	668	711	800	708	709	751
Female	472	521	560	549	569	726	719	755	744	671	708

TABLE 8-22

NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR, ARIZONA, 1980-1990

Cause of Death/Gender	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Malignant Neoplasms, Total	4,434	4,570	4,809	5,019	5,273	5,570	5,808	6,126	6,269	6,351	6,778
Male	2,454	2,554	2,686	2,766	2,910	3,036	3,152	3,380	3,489	3,413	3,672
Female	1,980	2,016	2,123	2,253	2,363	2,534	2,656	2,746	2,780	2,938	3,106
Lip, Oral Cavity and Pharynx	76	88	90	86	82	72	81	77	84	97	81
Male	55	57	58	60	51	48	58	51	50	57	50
Female	21	31	32	26	31	24	23	26	34	40	31
Digestive Organs and Peritoneum	1,102	1,169	1,157	1,191	1,277	1,392	1,340	1,415	1,449	1,505	1,520
Male	614	661	629	685	690	720	726	800	798	798	846
Female	488	508	528	506	587	672	614	615	651	707	674
Trachea, Bronchus and Lung	1,199	1,199	1,271	1,316	1,395	1,512	1,517	1,748	1,850	1,733	1,901
Male	840	826	879	880	952	1,015	978	1,127	1,248	1,059	1,157
Female	359	373	392	436	443	497	539	621	602	674	744
Skin[1]	58	54	63	65	63	75	97	80	80	106	101
Male	28	38	39	43	45	63	59	51	46	66	62
Female	30	16	24	22	18	12	38	29	34	40	39
Breast	398	403	383	416	461	438	497	504	498	519	562
Male	-	-	5	3	3	4	7	4	5	3	1
Female	398	403	378	413	458	434	490	500	493	516	561
Genital Organs	483	493	525	596	551	547	657	636	649	657	786
Male	258	284	277	336	325	303	393	358	392	427	484
Female	225	209	248	260	226	244	264	278	257	230	302
Urinary Organs	172	216	212	238	207	267	274	256	276	274	305
Male	118	152	153	161	147	173	176	182	189	181	201
Female	54	64	59	77	60	94	98	74	87	93	104
Leukemia	193	203	191	195	201	223	226	244	250	237	263
Male	114	124	112	101	125	131	131	141	154	132	154
Female	79	79	79	94	76	92	95	103	96	105	109
Other Malignant Neoplasms of Lymphatic and Hematopoietic Tissue	219	215	264	250	328	308	324	335	357	381	407
Male	128	123	156	144	174	178	179	198	193	211	234
Female	91	92	108	106	154	130	145	137	164	170	173
All Other	534	530	653	666	708	736	795	831	776	842	721
Male	299	289	378	353	398	401	445	468	414	479	411
Female	235	241	275	313	310	335	350	363	362	363	311

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[1] Malignant melonoma of skin (ICD-9: 172).

TABLE 8-23

NUMBER OF DEATHS FROM MOTOR VEHICLE ACCIDENTS BY PERSON INJURED, GENDER AND YEAR, ARIZONA, 1980-1990

Person Injured	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Driver,[1] total	344	337	249	241	266	267	238	231	260	222	267
Male	267	270	188	173	200	192	165	163	182	171	179
Female	77	67	61	68	66	75	73	68	78	51	88
Occupant,[2] total	237	248	203	186	261	303	419	459	347	381	366
Male	144	146	110	112	170	209	257	304	224	240	234
Female	93	102	93	74	91	94	162	155	123	141	132
Motorcyclist,[3] total	104	109	88	100	105	100	79	60	82	46	61
Male	89	97	78	92	97	87	74	52	71	41	56
Female	15	12	10	8	8	13	5	8	11	5	5
Pedal Cyclist, total	18	18	28	14	25	15	15	16	30	25	31
Male	15	14	24	13	17	13	14	14	26	23	26
Female	3	4	4	1	8	2	1	2	4	2	5
Pedestrian, total	182	190	144	144	199	179	185	146	177	147	141
Male	128	132	104	105	144	131	135	111	121	112	102
Female	54	58	40	39	55	48	50	35	56	35	39
Total	885	902	712	685	856	864	936	912	896	821	866
Male	643	659	504	459	628	632	645	644	624	587	597
Female	242	243	208	190	228	232	291	268	272	234	269

[1] All motor vehicles except motorcycles.
[2] Non-driving passengers of all motor vehicles except motorcycles.
[3] Includes both drivers of and passengers on motorcycles.

TABLE 8-24

NUMBER OF DEATHS FROM UNINTENTIONAL INJURIES IN ACCIDENTS NOT INVOLVING MOTOR VEHICLES, BY CAUSE, GENDER AND YEAR, ARIZONA, 1980-1990

Cause of Death	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Unintentional injuries from accidents not involving motor vehicles, total	637	639	653	625	630	593	627	655	728	691	673
Male	459	458	438	426	432	390	434	458	513	497	486
Female	178	181	215	199	198	203	193	197	215	194	187
Transport Accidents[1]	61	55	90	63	56	41	55	53	53	45	28
Male	50	50	73	52	43	32	45	43	43	41	26
Female	11	5	17	11	13	9	10	10	10	4	2
Poisoning by Drugs/Medicaments	21	33	28	37	54	54	65	70	97	99	81
Male	13	17	19	22	38	32	48	55	75	79	64
Female	8	16	9	15	16	22	17	15	22	20	17
Poisoning by Other Substances[2]	9	21	13	21	21	19	20	41	55	36	40
Male	6	16	10	15	17	12	13	30	41	30	34
Female	3	5	3	6	4	7	7	11	14	6	6
Accidental Fall	184	150	165	173	185	152	157	149	167	161	177
Male	108	82	83	95	101	77	83	81	92	85	91
Female	76	68	82	78	84	75	74	68	75	76	86
Fire and Flames[3]	47	32	38	31	42	44	35	41	41	45	43
Male	30	17	18	21	27	28	25	20	28	27	32
Female	17	15	20	10	15	16	10	21	13	18	11
Excessive Heat due to Weather Conditions	26	18	15	13	12	21	10	7	20	14	31
Male	21	15	11	11	10	18	7	4	15	8	19
Female	5	3	4	2	2	3	3	3	5	6	12
Excessive Cold Due to Weather Conditions	13	3	15	6	3	9	3	8	12	19	17
Male	10	3	14	6	2	8	3	8	11	14	16
Female	3	0	1	0	1	1	0	0	1	5	1
Drowning[4]	93	122	96	92	78	93	111	105	103	94	82
Male	75	100	64	72	52	71	85	82	72	78	66
Female	18	22	32	20	26	22	26	23	31	16	16
Suffocation[5]	39	55	43	40	46	51	52	57	48	45	53
Male	28	39	32	28	34	30	33	43	32	27	40
Female	11	16	11	12	12	21	19	14	16	18	13
Firearms	27	19	16	10	23	22	22	14	16	26	18
Male	27	16	13	9	21	18	20	10	12	22	17
Female	0	3	3	1	2	4	2	4	4	4	1
Medical/Surgical[6]	5	12	12	15	11	5	6	13	9	8	10
Male	4	5	5	4	4	2	2	7	4	4	7
Female	1	7	7	11	7	3	4	6	5	4	3
All Other	112	119	122	124	99	82	91	97	107	99	93
Male	87	98	96	91	83	62	70	75	88	82	74
Female	25	21	26	33	16	20	21	22	19	17	19

[1] Includes accidents involving railway, watercraft, aircraft and road vehicles other than motor vehicles.

[2] Poisoning by other solid and liquid substances, gases and vapors.

[3] Burning by fire, asphyxia or poisoning due to conflagration or ignition.

[4] Excludes drowning in water transport accidents.

[5] Includes inhalation or ingestion of food or other objects causing suffocation and accidental mechanical suffocation.

[6] Includes misadventures to patients during surgical and medical care and adverse effects of drugs in therapeutic use.

TABLE 8-25

BODY DISPOSITION BY COUNTY OF OCCURRENCE, ARIZONA RESIDENTS, 1990

		DISPOSITION				
County of Occurrence	Total	Burial	Cremation	Moved Outside State	Willed to an Institution	Unknown
Apache	237	218	13	6	0	0
Cochise	609	296	233	78	2	0
Coconino	382	241	109	31	0	1
Gila	369	241	109	19	0	0
Graham	175	136	35	3	1	0
Greenlee	29	17	11	1	0	0
La Paz	73	31	26	16	0	0
Maricopa	16,305	7,233	6,887	2,169	15	1
Mohave	884	225	543	115	0	1
Navajo	383	288	80	15	0	0
Pima	5,887	2,493	2,671	678	38	7
Pinal	584	323	202	55	3	1
Santa Cruz	91	62	23	6	0	0
Yavapai	1,134	419	593	122	0	0
Yuma	607	225	277	105	0	0
OUT-OF-STATE	722	321	255	144	0	2
Total	28,471	12,769	12,067	3,563	59	13

TABLE 8-26

BODY DISPOSITION BY COUNTY OF RESIDENCE, ARIZONA, 1990

		DISPOSITION				
County of Residence	Total	Burial	Cremation	Moved Outside State	Willed to an Institution	Unknown
Apache	391	341	19	31	0	0
Cochise	797	383	310	102	2	0
Coconino	397	250	111	35	0	1
Gila	462	298	142	22	0	0
Graham	220	174	37	8	1	0
Greenlee	58	41	14	3	0	0
La Paz	132	55	52	25	0	0
Maricopa	15,805	6,923	6,738	2,124	15	5
Mohave	1,070	266	640	164	0	0
Navajo	521	405	90	26	0	0
Pima	5,571	2,314	2,569	644	37	7
Pinal	1,004	535	356	110	3	0
Santa Cruz	139	85	38	15	1	0
Yavapai	1,218	442	645	131	0	0
Yuma	686	257	306	123	0	0
Total	28,471	12,769	12,067	3,563	59	13

MARRIAGE AND DIVORCE STATISTICS

TABLE 9-1

MARRIAGES BY COUNTY OF OCCURRENCE,[1] ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	30,223	31,906	31,408	30,809	33,311	35,723	36,025	36,207	35,661	35,738	36,842
Apache	165	196	227	169	192	181	217	195	192	265	279
Cochise	1,072	1,008	946	995	961	992	981	878	887	829	846
Coconino	775	946	878	554	624	656	855	940	976	958	982
Gila	512	551	437	417	411	403	418	419	378	420	439
Graham	317	331	276	270	261	284	327	275	277	292	282
Greenlee	85	103	90	68	63	53	53	59	56	36	46
La Paz[2]	NA	NA	NA	103	98	186	193	145	186	140	235
Maricopa[3]	16,134	17,176	17,551	17,431	19,408	21,860	21,340	21,003	20,610	20,518	20,957
Mohave	407	481	457	491	531	698	788	1,056	1,456	1,764	2,122
Navajo	581	511	519	496	517	548	504	486	591	536	576
Pima	5,728	6,152	6,096	6,046	6,282	5,692	6,325	6,677	6,088	6,095	6,128
Pinal	947	925	861	857	920	923	847	895	872	739	837
Santa Cruz	311	286	316	289	325	350	356	311	329	356	355
Yavapai	610	745	658	726	743	887	889	879	789	762	786
Yuma	2,579	2,495	2,096	1,897	1,975	2,010	1,932	1,989	1,974	2,028	1,872

[1] Marriages recorded unless otherwise indicated.
[2] Included in Yuma County until January 1, 1983.
[3] Marriage licenses issued during the 1980-1988 period.

TABLE 9-2

MARRIAGE RATES[1] BY COUNTY OF OCCURRENCE, ARIZONA, UNITED STATES, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	10.9	10.8	10.6	10.5	10.5	10.2	10.0	9.9	9.7	9.7[2]	9.8[2]
ARIZONA	11.1	11.4	11.0	10.5	10.9	11.2	10.7	10.4	9.9	9.6	10.1
Apache	3.2	3.7	4.1	3.0	3.7	3.2	3.6	3.1	3.0	4.0	4.5
Cochise	12.4	11.3	10.5	10.9	10.5	10.3	10.0	8.8	8.7	7.9	8.7
Coconino	10.3	11.8	10.5	6.8	7.6	7.6	9.6	10.2	10.3	9.8	10.2
Gila	13.8	14.6	11.4	10.7	10.9	10.6	10.5	10.4	9.3	10.2	10.9
Graham	13.6	14.3	11.5	11.2	10.9	12.2	13.3	11.1	11.3	11.6	10.6
Greenlee	7.5	8.5	6.9	5.7	5.5	6.1	5.5	6.1	5.9	3.8	5.7
La Paz[3]	NA	NA	NA	7.9	7.3	12.9	13.7	10.2	13.0	9.7	17.0
Maricopa	10.7	11.1	11.0	10.7	11.2	12.1	11.2	10.6	10.0	9.5	9.9
Mohave	7.3	8.5	8.0	8.2	8.1	9.6	10.2	13.3	17.9	21.1	23.8
Navajo	8.5	7.4	7.3	6.9	7.3	7.6	6.8	6.4	7.6	6.7	7.4
Pima	10.9	11.2	10.7	10.4	10.4	9.1	9.8	10.1	8.9	8.6	9.2
Pinal	10.4	9.9	9.1	8.9	9.3	9.2	8.2	8.4	7.9	6.5	7.2
Santa Cruz	15.2	13.5	14.4	13.0	14.5	12.9	12.9	10.7	10.9	11.5	12.0
Yavapai	9.0	10.7	9.1	9.9	9.2	10.1	9.7	9.2	8.1	7.5	7.3
Yuma	28.5	27.3	22.1	23.5	23.1	22.3	22.0	22.2	21.6	21.7	17.5

[1] Per 1,000 population.
[2] Preliminary.
[3] Included in Yuma County prior to 1983.

TABLE 9-3

MARRIAGES* BY COUNTY OF OCCURRENCE, BY MONTH,* ARIZONA, 1990

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Apache	25	18	19	26	31	34	32	22	24	17	15	16	279
Cochise	73	85	66	64	79	78	52	73	57	67	67	85	846
Coconino	69	59	54	46	114	94	102	118	82	104	66	74	982
Gila	27	38	31	35	46	37	35	45	23	41	50	31	439
Graham	23	17	21	29	17	28	25	28	19	25	25	25	282
Greenlee	2	8	4	1	5	3	4	4	3	4	3	5	46
La Paz	14	24	26	20	16	14	21	21	21	12	30	16	235
Maricopa	2,018	1,432	1,802	1,940	2,039	2,014	1,417	1,123	1,633	2,019	1,920	1,600	20,957
Mohave	123	126	257	246	176	243	163	239	124	126	259	140	2,222
Navajo	53	18	49	74	60	62	46	67	37	46	31	33	576
Pima	579	379	553	515	573	620	507	319	493	587	501	502	6,128
Pinal	91	89	63	82	77	70	46	66	55	61	54	83	837
Santa Cruz	30	22	35	32	33	19	46	18	22	41	25	32	355
Yavapai	43	58	55	71	72	95	54	72	60	68	64	74	786
Yuma	173	63	210	160	171	166	147	186	139	130	152	175	1,872
Monthly Total	**3,343**	**2,436**	**3,245**	**3,341**	**3,509**	**3,577**	**2,697**	**2,401**	**2,792**	**3,348**	**3,262**	**2,891**	**36,842**

* Marriages recorded unless otherwise indicated

TABLE 9-4

DISSOLUTIONS OF MARRIAGE BY COUNTY OF OCCURRENCE, ARIZONA, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA	19,858	20,819	20,259	19,875	20,009	21,157	23,062	23,760	24,928	23,153	25,088
Apache	82	85	91	83	97	110	136	88	68	81	84
Cochise	666	628	627	634	701	669	802	713	691	750	845
Coconino	432	489	416	378	429	578	458	520	471	635	579
Gila	259	281	256	253	289	239	235	233	260	222	225
Graham	157	193	181	146	152	203	133	167	141	139	183
Greenlee	52	53	61	52	32	35	19	39	38	33	41
La Paz[1]	NA	NA	NA	94	76	77	74	64	93	48	62
Maricopa	11,187	11,871	11,656	11,338	11,626	12,626	14,409	15,185	16,400	14,309	16,267
Mohave	457	494	498	531	482	563	558	519	535	616	647
Navajo	212	234	249	246	273	258	360	236	269	206	221
Pima	4,141	4,336	3,936	3,811	3,747	3,911	3,992	4,086	3,923	3,858	4,079
Pinal	744	696	666	672	699	622	644	618	673	678	661
Santa Cruz	106	76	131	116	97	84	92	109	129	127	120
Yavapai	543	550	603	645	629	523	544	619	611	720	696
Yuma	820	833	888	876	680	659	606	564	610	731	378

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[1] Included in Yuma County until January 1, 1983.

TABLE 9-5

DISSOLUTIONS OF MARRIAGE RATES[1] BY COUNTY OF OCCURRENCE, ARIZONA, UNITED STATES, 1980-1990

County	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S.	5.2	5.3	5.0	5.0	4.9	5.0	5.0	4.8	4.8	4.7[2]	4.7[2]
ARIZONA	7.3	7.4	7.0	6.8	6.5	6.6	6.9	6.8	6.9	6.2	6.8
Apache	1.6	1.6	1.6	1.5	1.9	1.9	2.2	1.4	1.1	1.2	1.4
Cochise	7.7	7.1	7.0	7.0	7.7	6.9	8.2	7.1	6.7	7.2	8.7
Coconino	5.8	6.1	5.0	4.6	5.2	6.7	5.1	5.7	5.0	6.5	6.0
Gila	7.0	7.5	6.7	6.5	7.6	6.3	5.9	5.8	6.4	5.4	5.6
Graham	6.9	8.3	7.6	6.0	6.3	8.7	5.4	6.8	5.7	5.5	6.9
Greenlee	4.6	4.4	4.7	4.3	2.8	4.0	2.0	4.0	4.0	3.5	5.1
La Paz[3]	NA	NA	NA	7.2	5.7	5.3	5.2	4.5	6.5	3.3	4.5
Maricopa	7.4	7.6	7.3	6.9	6.7	7.0	7.5	7.6	7.9	6.6	7.7
Mohave	8.2	8.7	8.7	8.9	7.4	7.8	7.2	6.5	6.6	7.4	6.9
Navajo	3.1	3.4	3.5	3.4	3.9	3.6	4.9	3.1	3.5	2.6	2.8
Pima	7.8	7.9	6.9	6.6	6.2	6.3	6.2	6.2	5.7	5.4	6.1
Pinal	8.2	7.4	7.0	7.0	7.1	6.2	6.2	5.8	6.1	6.0	5.7
Santa Cruz	5.2	3.6	6.0	5.2	4.3	3.1	3.3	3.7	4.3	4.1	4.0
Yavapai	8.0	7.9	8.4	8.8	7.8	5.9	5.9	6.5	6.2	7.1	6.5
Yuma	9.1	9.1	9.4	10.9	7.9	7.3	6.9	6.3	6.7	7.8	3.5

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[1] Per 1,000 population.
[2] Preliminary.
[3] Included in Yuma County prior to 1983.

TABLE 9-6

DISSOLUTIONS* OF MARRIAGE BY COUNTY OF OCCURRENCE, BY MONTH, ARIZONA, 1990

COUNTY	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Apache	10	4	4	7	7	8	8	11	3	8	9	5	84
Cochise	73	58	59	79	74	19	91	75	75	92	80	70	845
Coconino	53	31	37	88	38	37	49	42	39	83	42	40	579
Gila	26	16	17	17	24	17	24	20	20	14	11	19	225
Graham	20	26	12	7	17	17	14	17	9	17	13	14	183
Greenlee	5	6	3	1	1	5	2	2	3	5	3	5	41
La Paz	4	5	6	9	4	2	5	6	2	13	1	5	62
Maricopa	1,161	1,281	1,379	1,434	1,802	1,617	1,422	1,358	1,094	1,346	1,175	1,198	16,267
Mohave	65	46	45	56	65	27	59	30	51	58	105	40	647
Navajo	17	22	10	27	20	15	19	15	23	18	21	14	221
Pima	355	276	321	303	377	367	376	349	310	373	319	353	4,079
Pinal	54	53	80	55	64	41	54	36	74	24	50	76	661
Santa Cruz	10	5	14	9	13	8	16	8	7	7	16	7	120
Yavapai	57	28	30	68	62	58	70	61	64	89	54	55	696
Yuma	9	34	16	20	22	34	26	41	31	68	54	23	378
Monthly Total	**1,919**	**1,891**	**2,033**	**2,180**	**2,590**	**2,272**	**2,235**	**2,071**	**1,805**	**2,215**	**1,953**	**1,924**	**25,088**

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* Divorces and annulments granted.

PREGNANCY AND ABORTION STATISTICS

TABLE 10-1

ABORTIONS PERFORMED IN ARIZONA BY COUNTY OF RESIDENCE,[1] ARIZONA RESIDENTS, 1980-1990

	1980	1981	1982	1983	1984	1985	1986[2]	1987	1988	1989	1990
ARIZONA	8,959	10,047	11,965	13,081	13,909	14,537	14,455	15,615	14,350	11,575	13,890
Apache	33	34	39	35	26	45	24	23	23	28	22
Cochise	138	152	220	252	249	279	264	270	207	150	192
Coconino	374	326	389	422	394	313	263	390	459	387	351
Gila	60	79	84	73	62	69	50	49	44	31	49
Graham	37	22	30	31	20	26	20	15	18	12	25
Greenlee	12	8	17	11	15	17	17	30	27	15	13
La Paz[2]	NA	NA	NA	17	14	11	11	9	12	11	11
Maricopa	5,861	6,609	7,989	8,501	9,646	10,035	10,387	12,011	10,918	8,611	10,378
Mohave	44	27	34	21	50	24	37	20	52	48	54
Navajo	72	62	104	100	59	60	42	44	65	48	60
Pima	1,897	2,316	2,553	3,097	2,876	3,152	2,915	2,282	2,059	1,817	2,313
Pinal	199	166	227	251	164	182	179	187	205	173	137
Santa Cruz	42	43	53	49	57	58	52	53	51	45	64
Yavapai	135	170	186	169	139	141	103	150	132	128	155
Yuma	55	33	40	52	138	125	91	82	78	71	66

[1] Excludes records with unknown place of residence, and records of out-of-state residents

[2] Included in Yuma County prior to 1983.

TABLE 10-2

CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS, ARIZONA, 1980[1], 1985 AND 1990

	1980	1985	1990
TOTAL REPORTED ABORTIONS PERFORMED IN ARIZONA	9,278	15,604	15,783
RESIDENCE			
Resided in state	8,959	14,537	13,890
Resided out-of-state	234	403	357
Not stated	85	664	1,536
AGE			
19 years and under	2,893	3,617	2,940
20-24 years	3,489	5,800	4,290
25 years and over	2,674	5,747	5,975
Not stated	222	440	685
MARITAL STATUS			
Married	1,628	2,910	2,980
Unmarried	6,981	11,906	9,098
Not stated	669	788	1,812
ETHNIC GROUP			
White[2]	7,650	13,553	11,390
Non-white	961	1,411	1,230
Not stated	667	640	1,270
YEARS OF EDUCATION			
8 years or less	193	550	291
9-16 years	7,533	13,637	10,186
17 years or more	268	665	434
Not stated	1,284	752	2,979
PREVIOUS LIVE BIRTHS			
None	6,150	8,892	6,845
1 or more	3,128	6,712	7,045

	1980	1985	1990
FACILITY			
Clinic	6,009	9,862	10,778
Doctor's Office	3,174	5,011	1,579
Hospital	87	43	11
Not stated	8	688	1,522
TYPE OF PROCEDURE			
Curretage	9,214	15,175	13,171
Intrauterine Instillation	25	0	5
Hysterectomy/Hysterotomy	2	0	0
Not stated	107	429	714
WEEKS OF GESTATION			
12 weeks or under	8,342	13,415	10,890
13 weeks or over	841	1,952	857
Not stated	95	237	2,143
PREVIOUS INDUCED ABORTIONS			
None	6,728	10,201	8,712
1	2,003	3,747	3,595
2 or more	547	1,656	1,583
HOSPITALIZED FOR COMPLICATIONS			
No	10,555[3]	15,595	13,888
Yes	18[3]	9	2
REASON FOR TERMINATION			
Elective	9,031	15,274	13,075
Medical	18	16	10
Not stated	229	314	805

[1] 1980 frequencies are shown for all abortions occurring in Arizona.

[2] Includes Hispanics.

[3] 1981 - The number of hospitalized for complications in 1980 is not available.

TABLE 10-3

AGE-SPECIFIC NUMBER AND RATES OF LIVE BIRTHS (B) AND ABORTIONS (A), ARIZONA, 1980, 1985 AND 1990[1]

	1980		1985		1990	
AGE GROUP	B	A	B	A	B	A
Under 15						
Number	138	85	110	116	188	63
Rate	1.1	0.5	0.9	1.0	1.5	0.5
15-19						
Number	8,173	2,808	7,916	3,501	9,579	2,877
Rate	65.8	24.3	67.0	29.6	75.6	22.7
20-24						
Number	17,897	3,489	19,721	5,800	23,536	4,290
Rate	134.9	28.6	144.8	42.6	174.8	31.9
25-29						
Number	14,487	1,821	17,979	3,251	16,628	3,077
Rate	119.7	16.6	118.8	20.6	106.6	19.7
30-34						
Number	6,951	581	9,990	1,636	13,299	1,807
Rate	67.9	7.8	73.8	11.5	84.8	11.5
35-39						
Number	2,002	205	3,126	686	4,777	890
Rate	24.9	3.5	27.0	5.6	33.9	6.3
40-44						
Number	378	63	483	160	767	190
Rate	5.3	0.9	5.5	1.7	6.2	1.5
45 & over						
Number	19	4	15	14	23	11
Rate	0.1	0.1	0.2	0.2	0.2	0.1
TOTAL						
Number[2]	50,049	9,278	59,344	15,604	68,814	13,890
Rate[3]	79.0	16.3	79.6	19.7	82.1	16.6

[1] The age-specific live birth or abortion rate is the number of live births or abortions per 1,000 females in a specific age group. For females under 15 the calculated rate includes female population 10-14 years of age. For women over 44 the rate is calculated for the female population 45-49 years of age.

[2] The total includes records with unspecified age and is not the sum of the age groups.

[3] The value for live births is the general fertility rate. It is computed by dividing the total number of live births, regardless of age of mother, by the population of women of childbearing age (15-44 years of age), and multiplying the result by 1,000. Similarly, the general abortion rate is computed per 1,000 women of childbearing age (15-44 years old).

TABLE 10-4

NUMBER OF WOMEN HAVING ABORTIONS PER 1,000 WOMEN GIVING BIRTH,[1] BY COUNTY OF RESIDENCE, ARIZONA, 1980-1990

COUNTY OF RESIDENCE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Apache	20.3	20.2	21.1	19.6	14.3	24.3	13.7	12.4	12.2	15.7	12.2
Cochise	87.9	92.3	141.5	161.0	153.9	179.0	173.2	168.1	126.4	86.7	110.5
Coconino	205.0	188.1	220.0	233.4	217.3	160.8	143.9	194.1	233.5	109.7	178.6
Gila	85.1	103.9	103.7	106.9	92.3	107.5	80.0	86.1	66.8	47.6	65.4
Graham	72.3	43.2	64.1	71.3	44.8	64.0	50.6	33.7	43.1	26.8	59.0
Greenlee	44.1	26.7	66.4	59.5	76.9	105.6	160.4	241.9	243.2	144.2	123.8
La Paz[2]	NA	NA	NA	72.0	71.8	47.0	51.2	45.5	56.1	50.7	67.9
Maricopa	218.9	237.7	279.3	295.6	314.1	297.1	292.3	328.0	286.5	219.8	256.8
Mohave	50.5	30.5	38.4	22.7	50.6	24.8	34.7	17.0	42.4	35.5	36.3
Navajo	37.9	34.1	55.2	52.3	31.6	31.7	22.2	22.2	33.2	24.1	30.4
Pima	212.4	253.7	278.9	323.1	297.2	306.7	279.7	208.9	183.6	161.4	202.7
Pinal	108.2	87.4	116.7	134.3	88.7	88.8	87.2	88.0	97.9	82.5	64.2
Santa Cruz	84.2	82.9	107.9	107.2	111.3	110.9	103.2	96.9	76.7	64.3	81.6
Yavapai	144.1	170.3	174.3	158.4	139.1	129.6	91.2	128.1	102.7	102.9	127.0
Yuma	30.7	17.0	21.0	30.9	78.8	63.7	46.2	41.6	37.2	30.3	27.0
Arizona, Total:	179.0	194.6	227.4	247.2	252.4	245.0	237.7	246.6	218.9	172.4	201.8

[1] The number of abortions per 1,000 live births in specified county.
[2] Included in Yuma County prior to 1983.

TABLE 10-5

NUMBER OF LIVE BIRTHS, ABORTIONS AND RATIOS[1] OF INDUCED TERMINATIONS OF PREGNANCY BY ETHNIC GROUP AND YEAR, ARIZONA, 1980-1990

Ethnic Group	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total, all ethnic groups[2]											
Births	50,049	51,620	52,628	52,919	55,109	59,344	60,822	63,320	65,544	67,128	68,814
Abortions	8,959	10,047	11,965	13,081	13,909	14,537	14,455	15,615	14,350	11,575	13,890
Abortion ratio	179.0	194.6	227.4	247.2	252.4	245.0	237.7	246.6	218.9	172.4	201.8
WHITE[3]											
Births	31,597	32,495	33,419	33,664	35,183	37,972	38,044	39,616	39,821	39,484	39,733
Abortions	6,665	8,069	9,282	10,039	10,344	10,328	9,388	11,093	9,918	7,978	9,035
Abortion ratio	210.9	248.3	277.7	298.2	294.0	272.0	246.8	280.0	249.1	202.1	227.4
HISPANIC[4]											
Births	11,495	11,896	11,630	11,477	12,067	13,062	14,044	14,402	15,952	17,663	19,321
Abortions	1,075	1,002	1,000	1,074	1,665	1,812	2,054	2,258	2,074	1,871	2,355
Abortion ratio	93.5	84.2	85.9	93.6	138.7	138.7	146.3	156.8	130.0	105.9	121.9
BLACK											
Births	1,634	1,759	1,800	1,820	1,911	1,969	2,157	2,289	2,406	2,528	2,562
Abortions	430	378	463	603	663	660	741	810	728	549	714
Abortion ratio	263.2	197.8	257.2	331.3	346.9	335.2	343.5	353.9	302.6	217.2	278.7
NATIVE AMERICAN											
Births	4,796	4,878	5,137	5,297	5,265	5,478	5,718	6,036	6,240	6,338	6,231
Abortions	152	123	175	241	232	262	251	285	322	264	314
Abortion ratio	31.7	25.2	34.1	45.5	44.1	47.8	43.9	47.2	51.6	41.7	50.4
OTHER RACE											
Births	527	592	642	661	683	863	859	977	1,125	1,106	967
Abortions	206	349	384	395	318	329	219	230	198	176	325
Abortion ratio	390.9	589.5	598.1	597.6	465.6	381.2	254.9	235.4	176.0	159.1	336.1

[1] Number of resident abortions performed in Arizona per 1,000 resident live births in specified ethnic group.
[2] Total for all ethnic groups includes record with unknown or unspecified ethnic group.
[3] Non-Hispanic
[4] White of Hispanic origin.

TABLE 10-6

ABORTIONS BY AGE AND COUNTY OF RESIDENCE
ARIZONA, 1990

COUNTY OF RESIDENCE	TOTAL	AGE									
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	>44	UNKNOWN
ARIZONA	13,890	63	994	1,883	4,290	3,077	1,807	890	190	11	685
Apache	22	0	0	4	6	5	5	0	1	0	1
Cochise	192	3	11	17	56	44	26	10	1	0	24
Coconino	351	2	20	65	119	70	38	20	5	2	10
Gila	49	1	6	6	10	10	11	3	1	0	1
Graham	25	0	6	1	10	3	4	0	0	1	0
Greenlee	13	0	1	3	1	3	1	1	1	0	2
La Paz	11	0	2	1	4	3	1	0	0	0	0
Maricopa	10,378	44	753	1,388	3,289	2,388	1,375	683	135	4	319
Mohave	54	0	2	3	25	12	6	1	2	0	3
Navajo	60	1	4	4	19	11	12	3	1	0	5
Pima	2,313	11	146	330	642	446	273	139	35	4	287
Pinal	137	1	15	15	40	28	18	7	2	0	11
Santa Cruz	64	0	8	9	16	10	10	4	0	0	7
Yavapai	155	0	17	25	31	25	24	17	6	0	10
Yuma	66	0	3	12	22	19	3	2	0	0	5

TABLE 10-7

ABORTIONS BY WEEK OF GESTATION OF PREGNANCY AND AGE OF WOMAN, ARIZONA, 1990

Week of Gestation:	AGE										
	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	>44	Unknown	Total
8 or less	17	332	727	1,810	1,423	884	445	95	4	263	6,000
9	8	138	283	606	448	266	102	24	0	96	1,971
10	4	119	196	467	277	138	78	17	1	79	1,376
11	7	83	127	292	179	99	45	7	0	44	883
12	2	63	120	232	134	54	24	7	1	23	660
13	3	34	64	112	71	35	15	2	1	17	354
14	5	32	53	86	55	36	12	2	0	13	294
15	0	12	16	29	21	11	5	2	0	4	100
16	0	5	9	11	7	4	3	0	0	0	39
17	0	1	5	6	3	4	4	0	1	0	24
18	0	2	3	9	5	3	1	0	0	0	23
19	0	1	6	2	5	3	1	0	0	0	18
20	0	0	0	0	1	0	0	0	0	0	1
21	0	0	1	2	1	0	0	0	0	0	4
Unknown	17	172	273	626	447	270	155	34	3	146	2,143
Total	63	994	1,883	4,290	3,077	1,807	890	190	11	685	13,890

TABLE 10-8

PREGNANCY RATES, NUMBER OF LIVE BIRTHS, FETAL DEATHS AND ABORTIONS BY AGE GROUP ARIZONA, 1990

Age	Estimated Female Population	Live Births	Fetal Deaths	Induced Abortions	Total Pregnancies: Number	Rate[1]	Percent Ending in Abortion	Abortion Ratio[2]
Under 15	126,204	188	2	63	253	2.0	24.9	335.1
15-19	126,651	9,579	60	2,877	12,516	98.8	23.0	300.3
20-24	134,672	19,316	110	4,290	23,716	176.1	18.1	222.1
25-29	155,921	20,848	100	3,077	24,025	154.1	12.8	147.6
30-34	156,878	13,299	80	1,807	15,186	96.8	11.9	135.9
35-39	140,895	4,777	39	890	5,706	40.5	15.6	186.3
40-44	123,091	767	10	190	967	7.9	19.6	247.7
45 and over	98,024	23	0	11	33	0.3	33.3	478.3
Unknown age	-	17	-	685	702	-	-	-
TOTAL[3]	838,108	68,814	401	13,890	83,105	99.2	16.7	201.8

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[1] The age-specific pregnancy rate is the number of pregnancies per 1,000 women in specified age group. For females under 15 the calculated rate includes the female population 10-14 years of age. For women over 44 the rate calculated includes the female population 45-49 years of age. The total pregnancy rate is computed by relating the total number of pregnancies, regardless of age of mother, to the population of women of child-bearing age (15-44 years of age).

[2] The number of abortions per 1,000 live births in specified group.

[3] The female population of childbearing age in Arizona in 1990. Population numbers for females under 15 and over 44 are excluded from the total population of women of childbearing age.

TABLE 10-9

NUMBER OF PREGNANCIES AND PREGNANCY RATES AMONG FEMALES 19 OR LESS YEARS OLD BY COUNTY OF RESIDENCE, ARIZONA, 1990

NUMBER OF PREGNANCIES:[1]

	Total, Females 19 or less Years Old	Under 15 Years	15-19 Years		
			TOTAL	15-17 Years	18-19 Years
ARIZONA	12,769	253	12,516	4,436	8,080
Apache	261	5	256	83	173
Cochise	306	9	297	111	186
Coconino	362	7	355	103	252
Gila	180	4	176	65	111
Graham	83	1	82	29	53
Greenlee	25	0	25	12	13
La Paz	36	0	36	14	22
Maricopa	7,674	163	7,511	2,716	4,795
Mohave	237	4	233	84	149
Navajo	332	8	324	117	207
Pima	2,029	37	1,992	676	1,316
Pinal	566	12	554	209	345
Santa Cruz	115	0	115	40	75
Yavapai	201	0	201	62	139
Yuma	360	2	358	114	244

PREGNANCY RATES:[2]

	Total, Females 19 or less Years Old	Under 15 Years	15-19 Years		
			TOTAL	15-17 Years	18-19 Years
ARIZONA	50.5	2.0	98.8	61.7	147.7
Apache	41.4	1.5	89.0	44.7	170.3
Cochise	42.3	2.4	84.5	49.3	147.4
Coconino	39.8	1.8	69.6	45.8	88.4
Gila	63.8	2.6	136.3	76.7	250.0
Graham	33.6	0.8	69.1	43.7	101.3
Greenlee	34.1	-	77.6	50.6	152.9
La Paz	39.3	-	87.8	55.3	140.1
Maricopa	54.7	2.3	106.9	67.5	159.7
Mohave	46.1	1.5	97.6	55.2	172.1
Navajo	45.3	2.0	96.8	53.5	178.6
Pima	45.0	1.7	83.7	55.3	113.6
Pinal	66.6	2.7	138.3	85.3	221.4
Santa Cruz	42.3	-	89.5	47.8	167.4
Yavapai	33.2	-	69.7	35.1	124.9
Yuma	44.5	0.5	90.1	48.1	151.8

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[1] The sum of live births, fetal deaths and abortions.

[2] The number of pregnancies per 1,000 females in specified group.

TABLE 10-10

PREGNANCY RATES[1] AND NUMBER OF LIVE BIRTHS, FETAL DEATHS AND ABORTIONS TO TEENS BY INDIVIDUAL AGE, ARIZONA, 1990

Age	Population[2]	Live Births	Stillbirths (Fetal Deaths)	Abortions	Total Pregnancies Number	Total Pregnancies Rate
10	26,310	0	0	0	0	-
11	26,311	1	0	0	1	*[3]
12	24,878	3	0	3	3	0.1
13	24,878	18	0	12	30	1.2
14	23,827	166	2	48	216	9.1
10-14	126,204	188	2	63	253	2.0
15	24,068	471	3	190	664	27.6
16	23,958	1,119	5	328	1,453	60.7
17	23,912	1,833	10	476	2,319	97.0
15-17	71,938	3,423	19	994	4,436	61.7
18	25,393	2,585	19	871	3,418	134.6
19	29,320	3,571	22	1,012	4,605	157.1
18-19	54,713	6,156	41	1,883	8,080	147.7
Total 10-19	252,855	9,767	62	2,940	12,769	50.5

[1] Rates per 1,000 estimated female population in specific group.

[2] 1990 Census of Population: The U.S. Census Bureau.

[3] Quantity more than zero but less than 0.1.

TABLE 10-11

NUMBER OF PREGNANCIES AND PREGNANCY RATES AMONG FEMALES 19 OR LESS YEARS OLD BY PREGNANCY OUTCOME AND ETHNICITY, ARIZONA, 1990

	NUMBER OF PREGNANCIES:				
	Total, Females 19 or less Years Old	Under 15 Years	15-19 Years		
			TOTAL	15-17 Years	18-19 Years
WHITE,[1] Total	6,052	73	5,979	1,894	4,085
Births	4,116	44	4,072	1,230	2,842
Abortions	1,895	29	1,866	653	1,213
Fetal deaths	41	0	41	11	30
HISPANIC, Total	4,507	106	4,401	1,763	2,638
Births	3,941	88	3,853	1,554	2,299
Abortions	566	18	548	209	339
Fetal deaths	NA	NA	NA	NA	NA
BLACK, Total	723	31	692	284	408
Births	562	23	539	235	304
Abortions	150	7	143	43	100
Fetal deaths	11	1	10	6	4
NATIVE AMERICAN, Total	1,172	34	1,138	409	729
Births	1,101	32	1,069	388	681
Abortions	64	1	63	19	44
Fetal deaths	7	1	6	2	4
ALL ETHNIC GROUPS,[2] Total	12,769	253	12,516	4,436	8,080
Births	9,767	188	9,579	3,423	6,156
Abortions	2,940	63	2,877	994	1,883
Fetal deaths	62	2	60	19	41

	PREGNANCY RATES:[3]				
	Total, Females 19 or less Years Old	Under 15 Years	15-19 Years		
			TOTAL	15-17 Years	18-19 Years
WHITE, Total	39.5	1.0	76.6	44.0	116.4
Births	26.9	0.6	52.1	28.6	81.0
Abortions	12.4	0.4	23.9	15.2	34.6
Fetal deaths	0.3	-	0.5	0.3	0.9
HISPANIC, Total	68.8	3.2	137.8	93.0	203.4
Births	60.1	2.6	120.7	82.0	177.3
Abortions	8.6	0.5	17.2	11.0	26.1
Fetal deaths	NA	NA	NA	NA	NA
BLACK, Total	79.3	6.6	155.6	106.8	228.3
Births	61.6	4.9	121.2	88.4	170.1
Abortions	16.5	1.5	32.2	16.2	56.0
Fetal deaths	1.2	0.2	2.3	2.3	2.2
NATIVE AMERICAN, Total	56.5	3.1	114.6	68.0	186.4
Births	53.1	3.0	107.7	64.5	174.1
Abortions	3.1	0.1	6.4	3.2	3.2
Fetal deaths	0.3	0.1	0.6	0.3	1.0
ALL ETHNIC GROUPS, Total	50.5	2.0	98.9	61.7	147.7
Births	38.6	1.5	75.6	47.6	112.5
Abortions	11.6	0.5	22.7	13.8	34.4
Fetal deaths	0.3	*	0.5	0.3	0.8

[1] Not of Hispanic origin.
[2] Includes other and/or unspecified ethnicity.
[3] Number of pregnancies (births, abortions or fetal deaths) per 1,000 females in specified group.
* Quantity more than zero but less than 0.1.

TABLE 10-12

NUMBER OF PREGNANCIES AND PREGNANCY RATES FOR ALL FEMALES AND TEENAGE FEMALES BY COUNTY OF RESIDENCE, ARIZONA, 1990

County	Female Population of Childbearing Age:[1]	TOTAL PREGNANCIES, ALL AGES		Female Population 10-19 Years Old	TEEN PREGNANCIES		
		Number	Rate[2]		Number	Rate[3]	Teen Pregnancies as a Percent of All Pregnancies
Apache	13,554	1,831	135.1	6,308	261	41.4	14.3
Cochise	20,359	1,937	95.1	7,230	306	42.3	15.8
Coconino	26,061	2,326	89.3	9,096	362	39.8	15.6
Gila	7,213	802	111.2	2,820	180	63.8	22.4
Graham	5,078	452	89.0	2,467	83	33.6	18.4
Greenlee	1,635	118	72.2	734	25	34.1	21.2
La Paz	2,497	175	70.1	917	36	39.3	20.6
Maricopa	500,829	51,026	101.9	140,321	7,674	54.7	15.0
Mohave	16,686	1,547	92.7	5,139	237	46.1	15.3
Navajo	16,513	2,047	124.0	7,326	332	45.3	16.2
Pima	156,529	13,798	88.2	45,114	2,029	45.0	14.7
Pinal	23,084	2,285	99.0	8,503	566	66.6	24.8
Santa Cruz	6,761	852	126.0	2,720	115	42.3	13.5
Yavapai	18,746	1,381	73.7	6,064	201	33.2	14.6
Yuma	22,563	2,528	112.0	8,096	360	44.5	14.2
ARIZONA	838,108	83,105	99.2	252,855	12,769	50.5	15.4

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[1] Females 15-44 years of age.

[2] The total pregnancy rate is computed by relating the total number of pregnancies, regardless of mother's age, to the total population of women of childbearing age (15-44 years old). The total pregnancy rate is presented as the number of pregnancies per 1,000 women 15-44 years of age.

[3] Number of pregnancies per 1,000 females 10-19 years old in specified county.

TABLE 10-13

NUMBER OF PREGNANCIES[1] AND PREGNANCY RATES[2] BY COUNTY OF RESIDENCE AND YEAR, FEMALES 15-19 YEARS OLD, ARIZONA, 1980 - 1990

Year		Arizona[3]	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
1980																	
	Number	10,981	309	282	378	180	109	53	NA	6,268	160	343	1,821	459	81	185	298
	Rate	88.7	99.1	70.6	81.2	113.5	91.5	110.4	NA	93.2	76.7	93.5	75.3	112.2	79.7	77.2	87.5
1981																	
	Number	10,863	303	325	364	172	114	47	NA	6,186	159	385	1,803	462	82	213	347
	Rate	89.5	100.1	80.5	94.2	105.9	100.0	98.5	NA	94.0	69.2	86.0	77.9	113.3	79.3	83.2	108.9
1982																	
	Number	11,330	372	275	359	198	106	51	NA	6,484	178	351	1,846	535	70	208	312
	Rate	95.2	124.0	67.1	106.4	114.6	93.6	102.4	NA	99.8	75.1	78.9	83.8	127.4	67.0	81.3	101.0
1983																	
	Number	10,964	313	278	335	161	91	31	46	6,282	171	355	1,902	459	64	199	277
	Rate	93.7	106.7	69.4	100.7	98.2	82.0	69.0	92.2	98.6	72.2	80.9	88.5	110.5	61.4	76.8	85.4
1984																	
	Number	10,667	309	229	339	148	93	41	35	6,260	157	314	1,816	415	78	159	274
	Rate	91.6	109.2	58.9	100.8	94.8	88.7	96.7	70.1	98.1	64.1	72.5	84.7	101.1	73.9	63.9	83.8
1985																	
	Number	11,315	274	236	330	153	88	33	53	6,568	144	297	1,963	463	72	177	289
	Rate	95.8	95.1	60.2	97.8	100.5	82.4	83.8	100.9	101.5	58.0	69.0	90.2	115.1	62.3	64.4	86.1
1986																	
	Number	11,342	273	258	331	130	81	22	43	6,884	169	296	1,859	442	79	167	308
	Rate	92.8	93.0	65.6	94.5	81.9	79.1	50.0	81.9	100.6	64.8	67.4	83.8	107.0	67.6	57.9	89.9
1987																	
	Number	12,055	276	300	355	124	86	32	40	7,388	170	308	1,855	483	88	200	350
	Rate	96.5	94.6	76.4	99.8	79.4	80.3	69.9	78.1	105.9	65.8	69.8	83.4	115.0	70.5	67.6	101.3
1988																	
	Number	12,090	284	265	352	131	75	18	51	7,374	198	319	1,861	513	99	221	329
	Rate	94.9	96.9	66.8	97.0	84.1	70.7	39.1	104.5	103.5	76.3	72.8	81.3	120.6	77.0	74.2	96.7
1989																	
	Number	11,784	282	285	385	135	79	20	41	7,113	201	294	1,806	474	103	194	371
	Rate	91.6	95.4	70.7	104.4	86.9	75.7	42.6	85.6	98.5	77.5	66.9	77.8	111.5	79.7	65.3	109.4
1990																	
	Number	12,516	256	297	355	176	82	25	36	7,511	233	324	1,992	554	115	201	358
	Rate	98.8	89.0	84.5	69.6	136.3	69.1	77.6	87.8	106.9	97.6	96.8	83.7	138.3	89.5	69.7	90.1

[1] Fetal death data by mother's age are not available prior to 1985, and pregnancies in Table 10-13 are measured as the sum of live births and induced abortions. Reportable fetal losses contribute 0.5 percent or less to all pregnancies to females under age 20.

[2] The number of pregnancies per 1,000 females 15-19 years old in specified county. Females 15-19 years old account for 98 percent of all pregnancies among females under age 20. The distribution of pregnancies among females under 15 years old by county of residence is shown in Table 10-9.

[3] The total includes records with unspecified county of residence.

TABLE 10-14

LIVE BIRTHS TO FEMALES 19 OR LESS YEARS OF AGE AS PERCENTAGE OF TOTAL LIVE BIRTHS BY AREA, ETHNIC GROUP AND YEAR, ARIZONA, 1980-1990

GROUP	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
ARIZONA, TOTAL[1]											
# births (all ages)	50,049	51,620	52,628	52,919	55,109	59,344	60,822	63,320	65,544	67,128	68,814
# births to teens	8,311	8,237	8,228	7,809	7,623	8,026	8,376	8,775	9,043	9,375	9,767
% births to teens	16.6	16.0	15.6	14.8	13.8	13.5	13.8	13.9	13.8	14.0	14.2
URBAN COUNTIES[2]											
# births (all ages)	35,700	36,930	37,753	38,343	40,389	44,058	45,757	47,548	49,325	50,436	54,274
# births to teens	5,751	5,545	5,581	5,395	5,322	5,699	6,010	6,229	6,467	6,737	7,330
% births to teens	16.1	15.0	14.8	14.1	13.2	12.9	13.1	13.1	13.1	13.4	13.5
RURAL COUNTIES											
# births (all ages)	14,349	14,690	14,875	14,576	14,720	15,286	15,065	15,772	16,219	16,692	14,540
# births to teens	2,560	2,692	2,647	2,414	2,301	2,327	2,366	2,546	2,576	2,638	2,437
% births to teens	17.8	18.3	17.8	16.6	15.6	15.2	15.7	16.1	15.9	15.8	16.8
WHITE[3]											
# births (all ages)	31,597	32,495	33,419	33,664	35,183	37,972	38,044	39,616	39,821	39,484	39,733
# births to teens	4,206	4,119	4,084	3,864	3,701	4,024	3,956	4,220	4,181	4,104	4,116
% births to teens	13.3	12.7	12.2	11.5	10.5	10.6	10.4	10.7	10.5	10.4	10.4
HISPANIC[4]											
# births (all ages)	11,495	11,896	11,630	11,477	12,067	13,062	14,044	14,402	15,952	17,663	19,321
# births to teens	2,557	2,515	2,546	2,360	2,394	2,529	2,808	2,886	3,099	3,459	3,941
% births to teens	22.2	21.1	21.9	20.6	19.8	19.4	20.0	20.0	19.4	19.6	20.4
BLACK											
# births (all ages)	1,634	1,759	1,800	1,820	1,911	1,969	2,157	2,289	2,406	2,528	2,562
# births to teens	445	467	443	473	448	432	481	517	552	593	562
% births to teens	27.2	26.5	24.6	26.0	23.4	21.9	22.3	22.6	22.9	23.5	21.9
NATIVE AMERICAN											
# births (all ages)	4,796	4,878	5,137	5,297	5,265	5,478	5,718	6,036	6,240	6,338	6,231
# births to teens	1,077	1,114	1,125	1,080	1,041	1,005	1,086	1,098	1,144	1,137	1,101
% births to teens	22.5	22.8	21.9	20.4	19.8	18.3	19.0	18.2	18.3	17.9	17.7

[1] Includes records for ethnic groups other than white, Hispanic, Black or Native American.

[2] Prior to 1990, Maricopa and Pima counties were delineated by the Census Bureau as urbanized areas in Arizona. Beginning in 1990, Yuma county met the criteria of the Census Bureau and was classified as urban. The remaining counties comprise Arizona's rural areas.

[3] Not of Hispanic origin.

[4] White of Hispanic origin.

TABLE 10-15

PREGNANCIES, PREGNANCY RATES AND NUMBER OF LIVE BIRTHS, FETAL DEATHS AND ABORTIONS BY ETHNICITY, ARIZONA, 1990

Pregnancies and their outcomes:	Total All Ethnic Groups:[1]	White[2]	Hispanic[3]	Black	Native American	Other
Total Pregnancies:	83,105	49,083	21,676	3,316	6,581	1,302
Live Births:	68,814	39,733	19,321	2,562	6,231	967
Fetal deaths:	401	315	NA[4]	40	36	10
Abortions:	13,890	9,035	2,355	714	314	325
Pregnancy rate:[5]	99.2	84.5	130.8	127.2	134.6	79.2

---

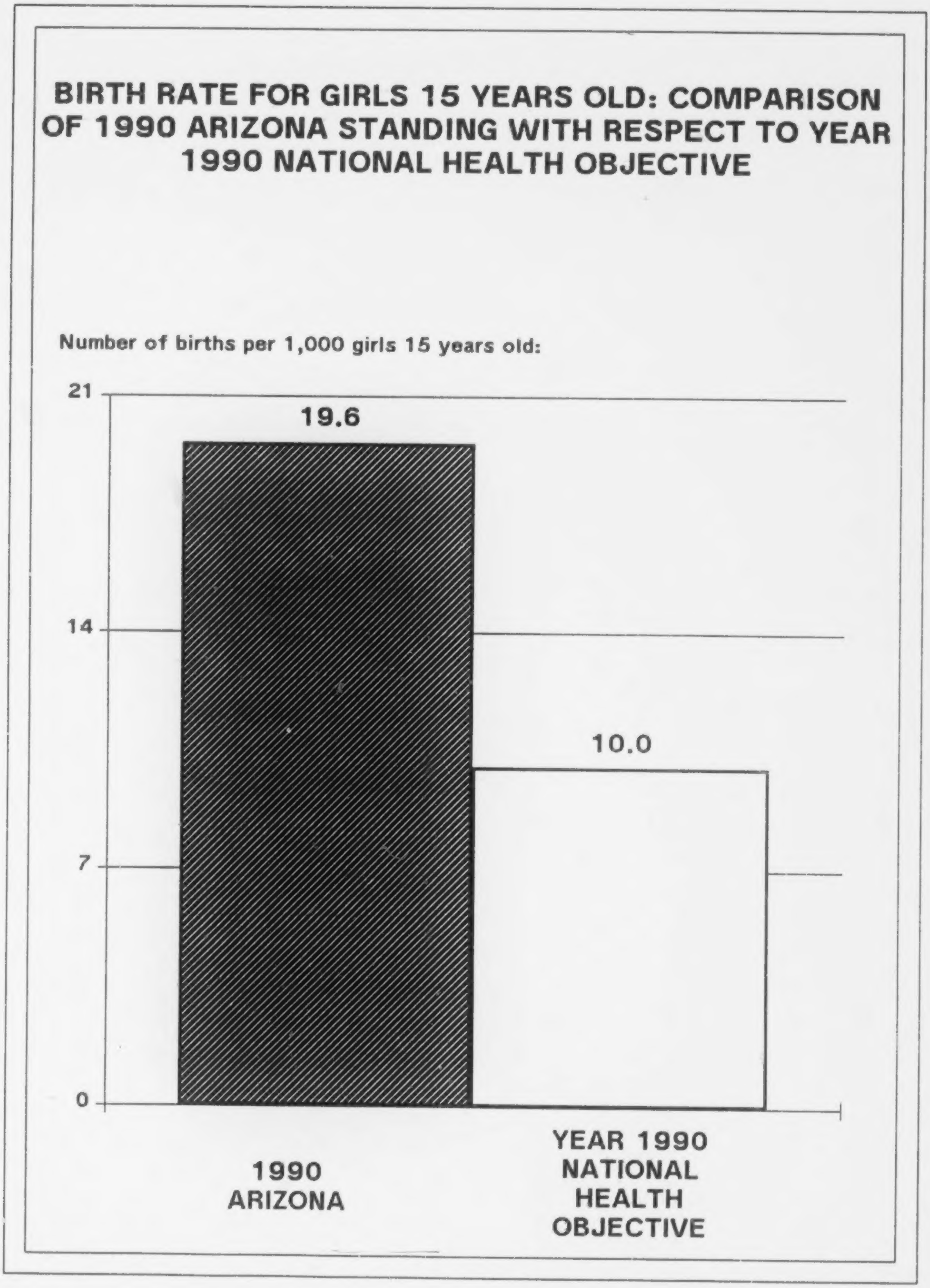
[1] Includes records with unspecified ethnic group.
[2] Not of Hispanic origin.
[3] Excludes non-whites of Hispanic origin.
[4] Not available on the annual fetal deaths tape.
[5] Number of pregnancies per 1,000 females 15-44 years old in specified ethnic group.

Part III:

COMPARISON WITH SELECTED NATIONAL HEALTH OBJECTIVES

1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 OBJECTIVES

FIGURE 51.



BIRTH RATE FOR GIRLS 15 YEARS OLD: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 52.

BIRTH RATE FOR GIRLS 16 YEARS OLD: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

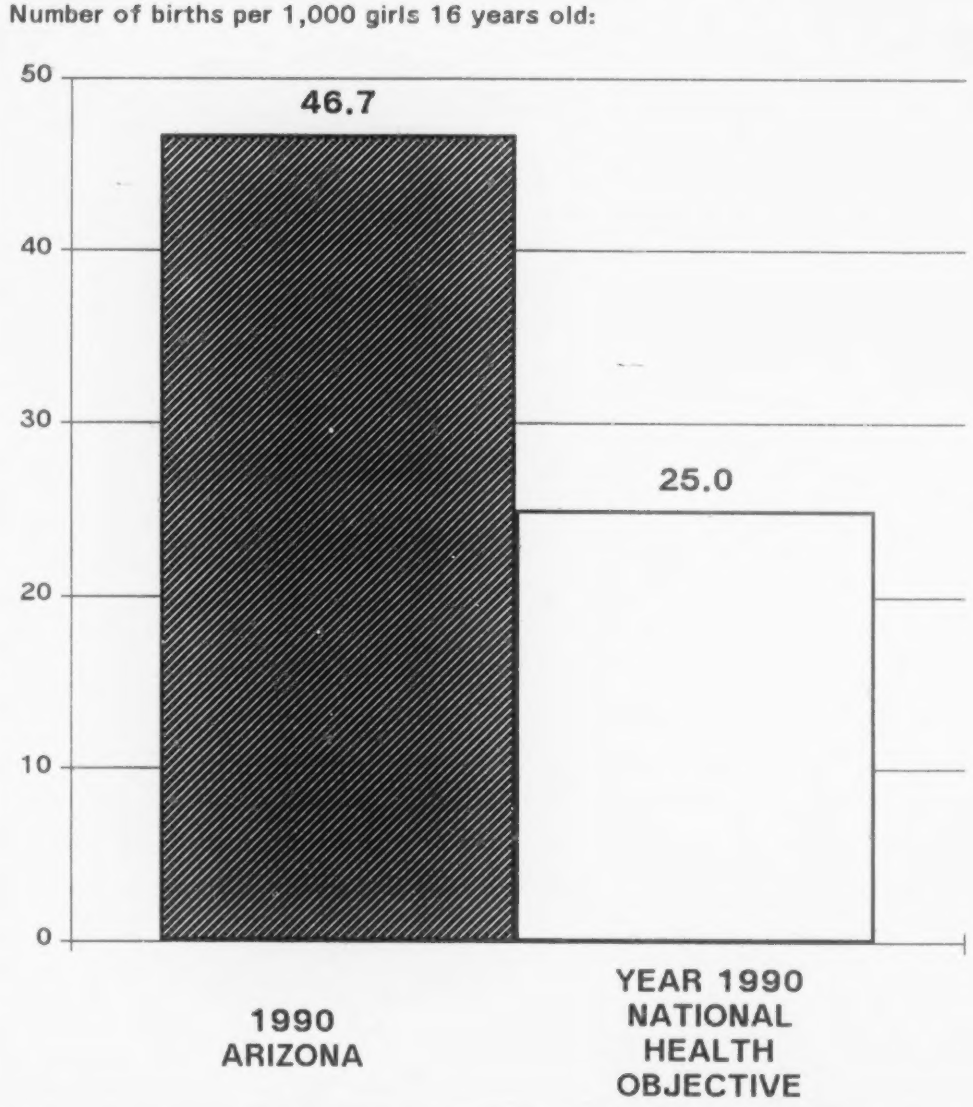


FIGURE 53.

BIRTH RATE FOR GIRLS 17 YEARS OLD: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

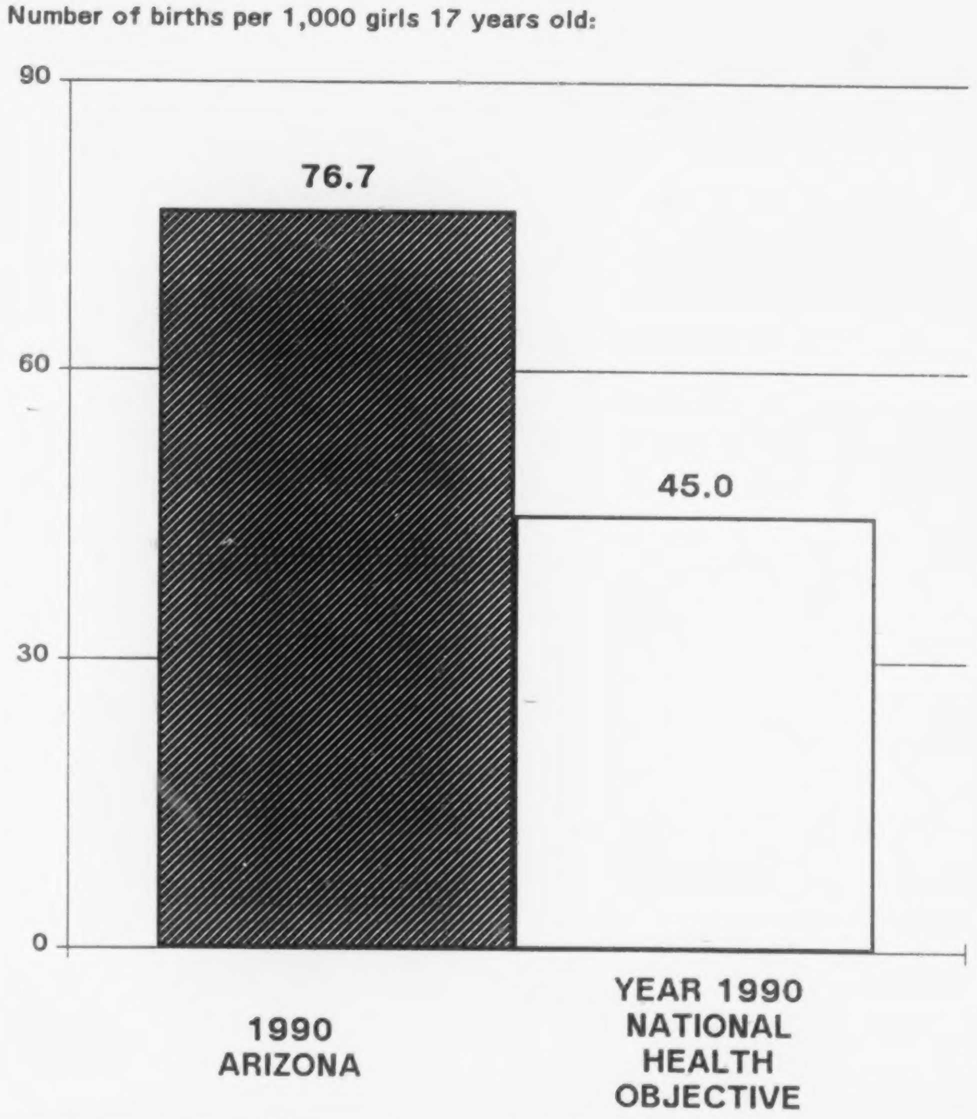


FIGURE 54.

LATE OR NO PRENATAL CARE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

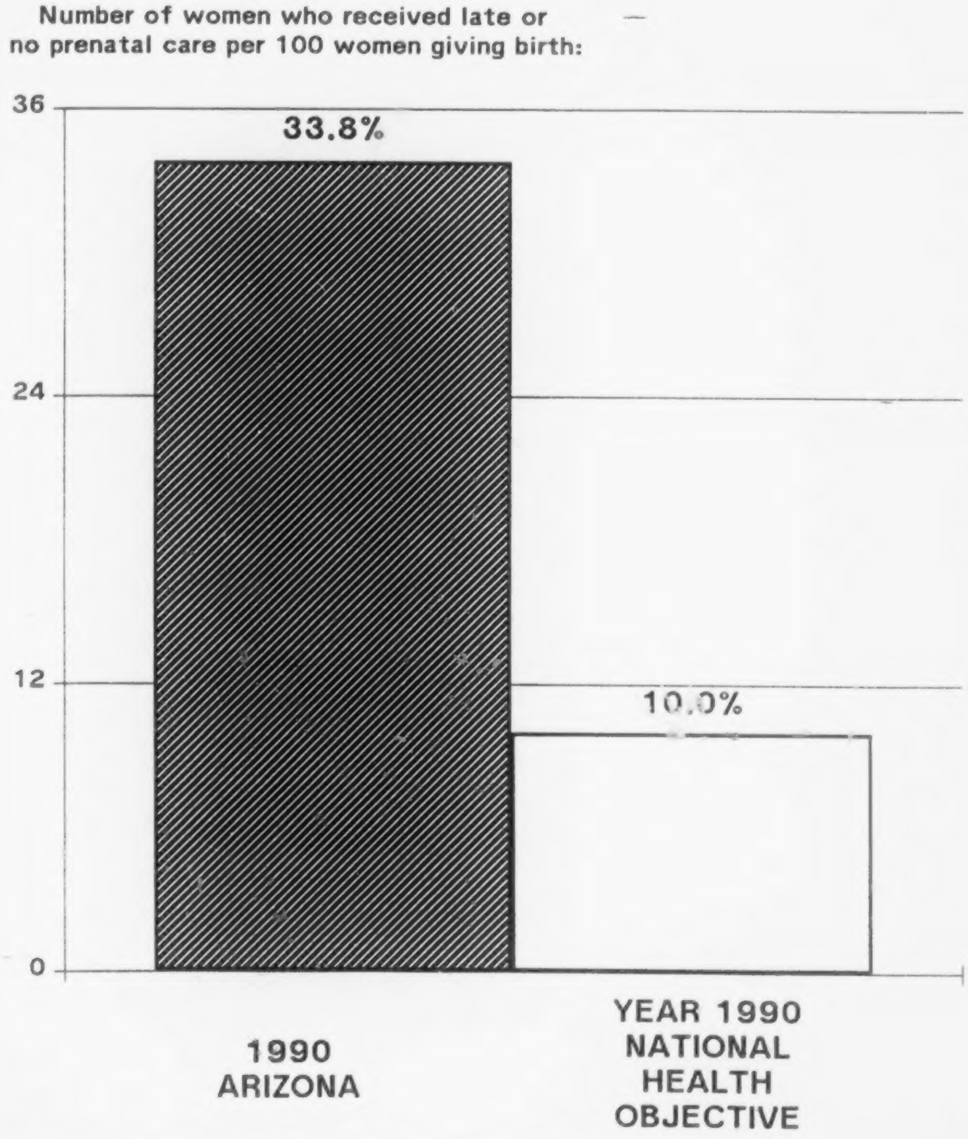


FIGURE 55.

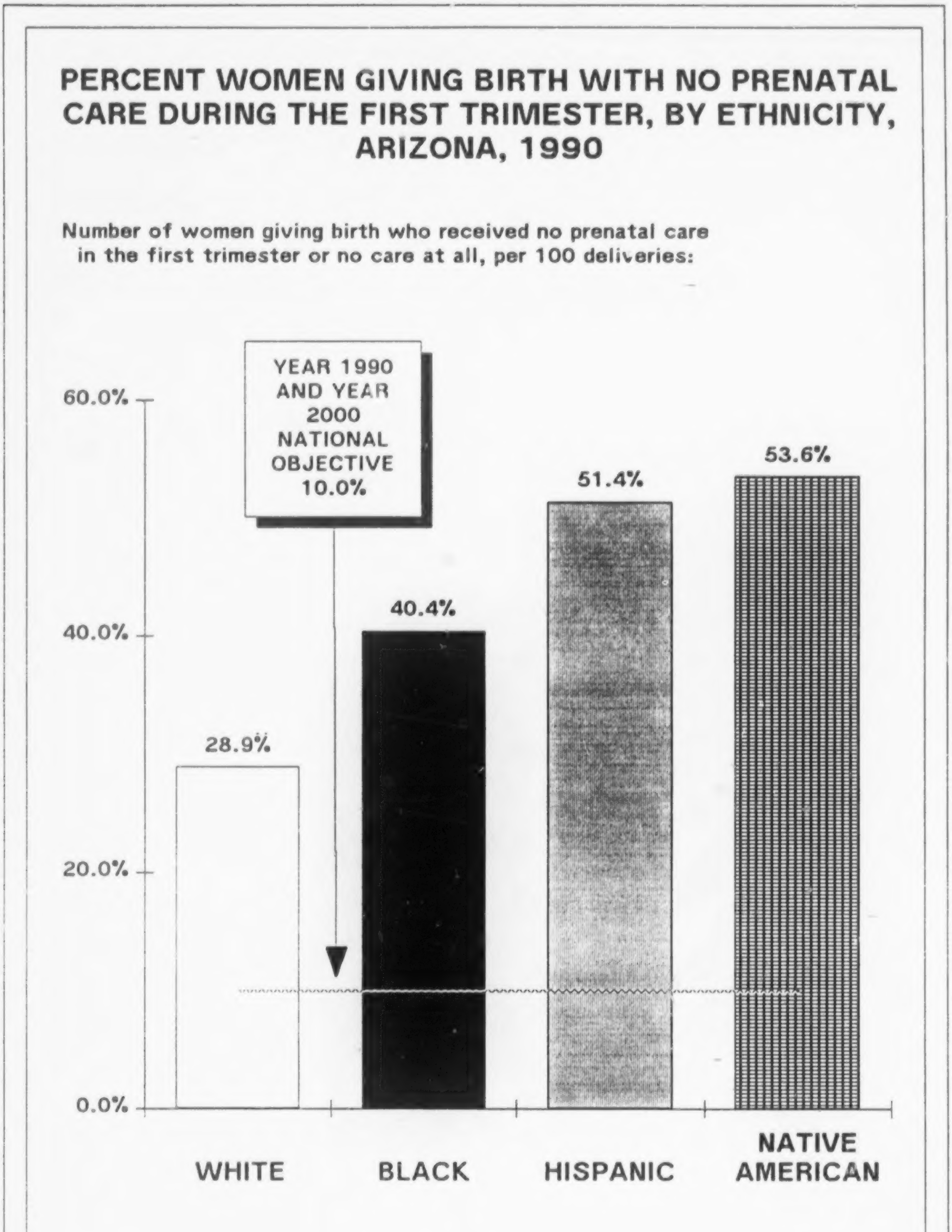

PERCENT WOMEN GIVING BIRTH WITH NO PRENATAL CARE DURING THE FIRST TRIMESTER, BY ETHNICITY, ARIZONA, 1990
Number of women giving birth who received no prenatal care in the first trimester or no care at all, per 100 deliveries:
YEAR 1990 AND YEAR 2000 NATIONAL OBJECTIVE 10.0%
60.0%
40.0%
20.0%
0.0%
28.9%
40.4%
51.4%
53.6%
WHITE
BLACK
HISPANIC
NATIVE AMERICAN

FIGURE 56.

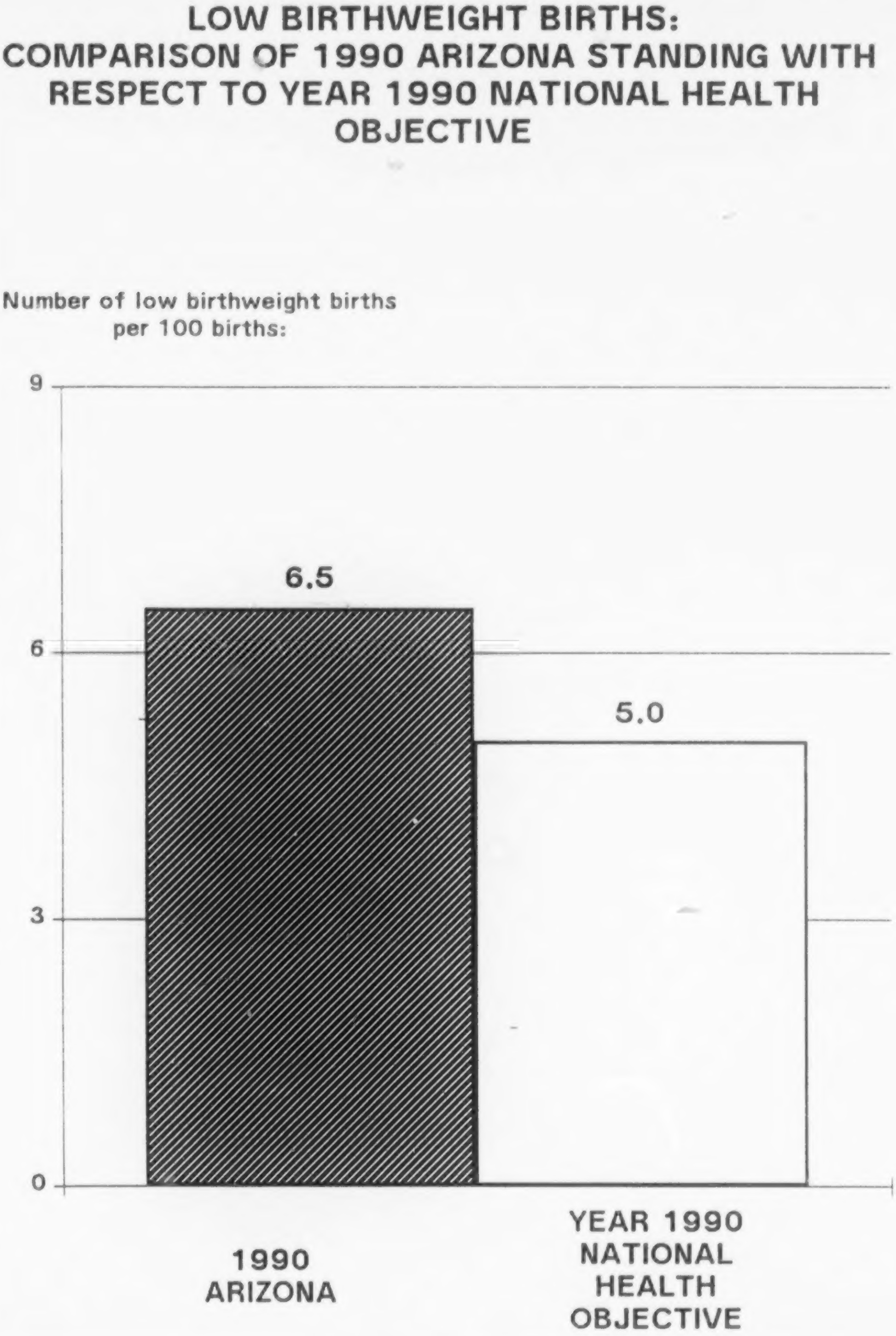

LOW BIRTHWEIGHT BIRTHS:
COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE
Number of low birthweight births per 100 births:
9
6
3
0
6.5
5.0
1990 ARIZONA
YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 57.

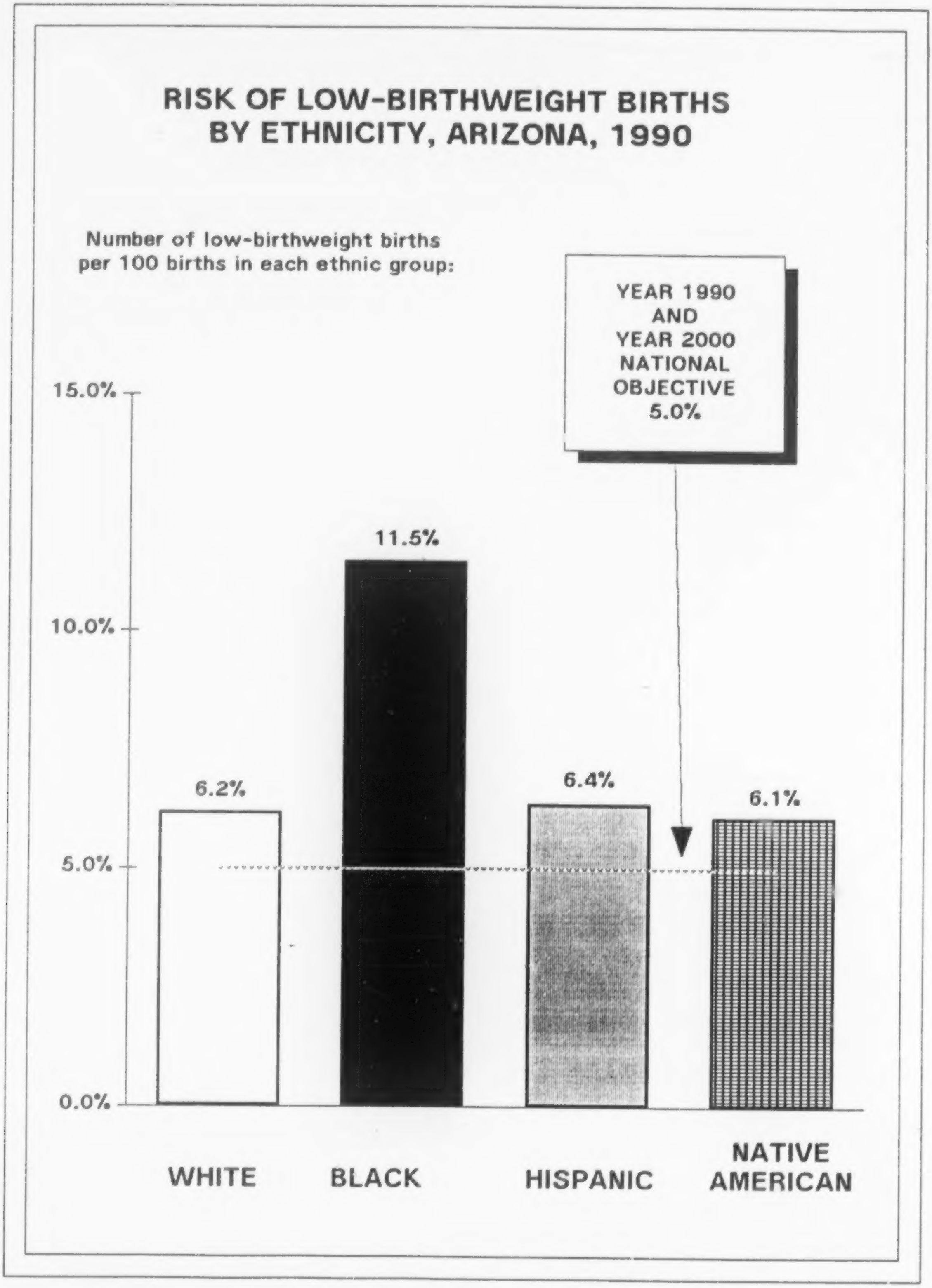

RISK OF LOW-BIRTHWEIGHT BIRTHS
BY ETHNICITY, ARIZONA, 1990
Number of low-birthweight births
per 100 births in each ethnic group:
YEAR 1990
AND
YEAR 2000
NATIONAL
OBJECTIVE
5.0%
15.0%
10.0%
5.0%
0.0%
6.2%
11.5%
6.4%
6.1%
WHITE
BLACK
HISPANIC
NATIVE
AMERICAN

FIGURE 58.

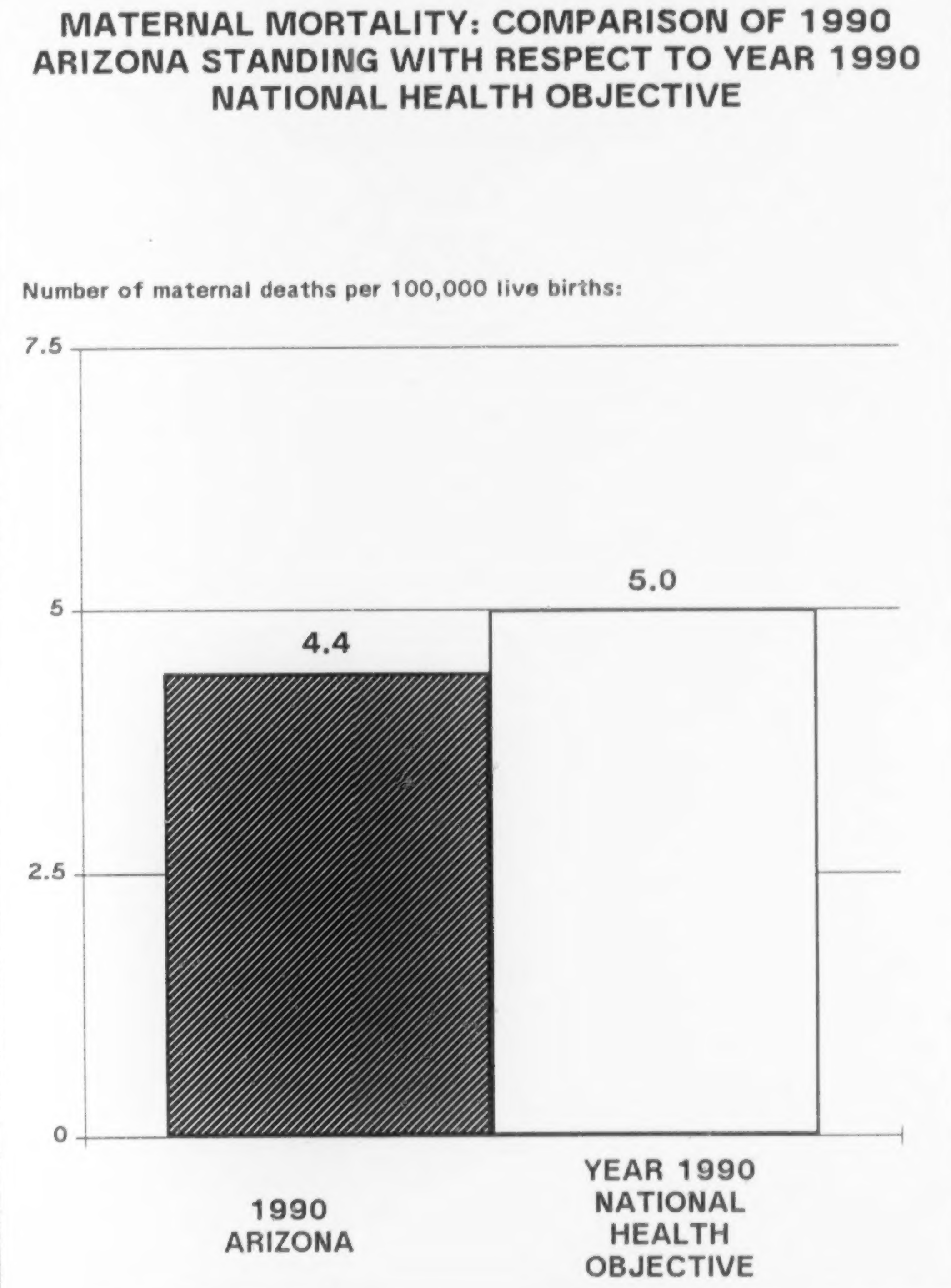

MATERNAL MORTALITY: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE
Number of maternal deaths per 100,000 live births:
7.5
5
2.5
0
4.4
5.0
1990 ARIZONA
YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 59.

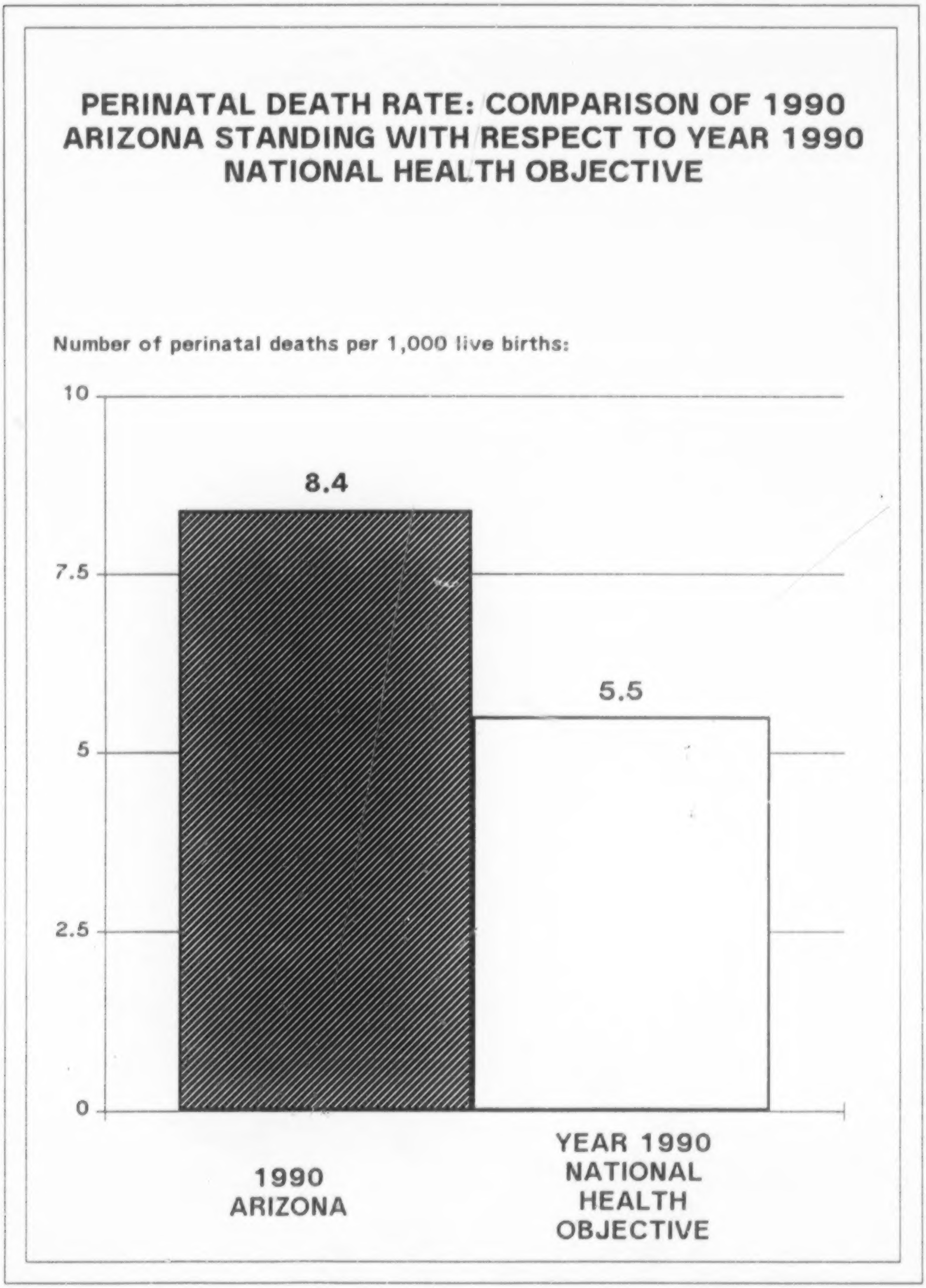

PERINATAL DEATH RATE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE
Number of perinatal deaths per 1,000 live births:
10
7.5
5
2.5
0
8.4
5.5
1990 ARIZONA
YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 60.

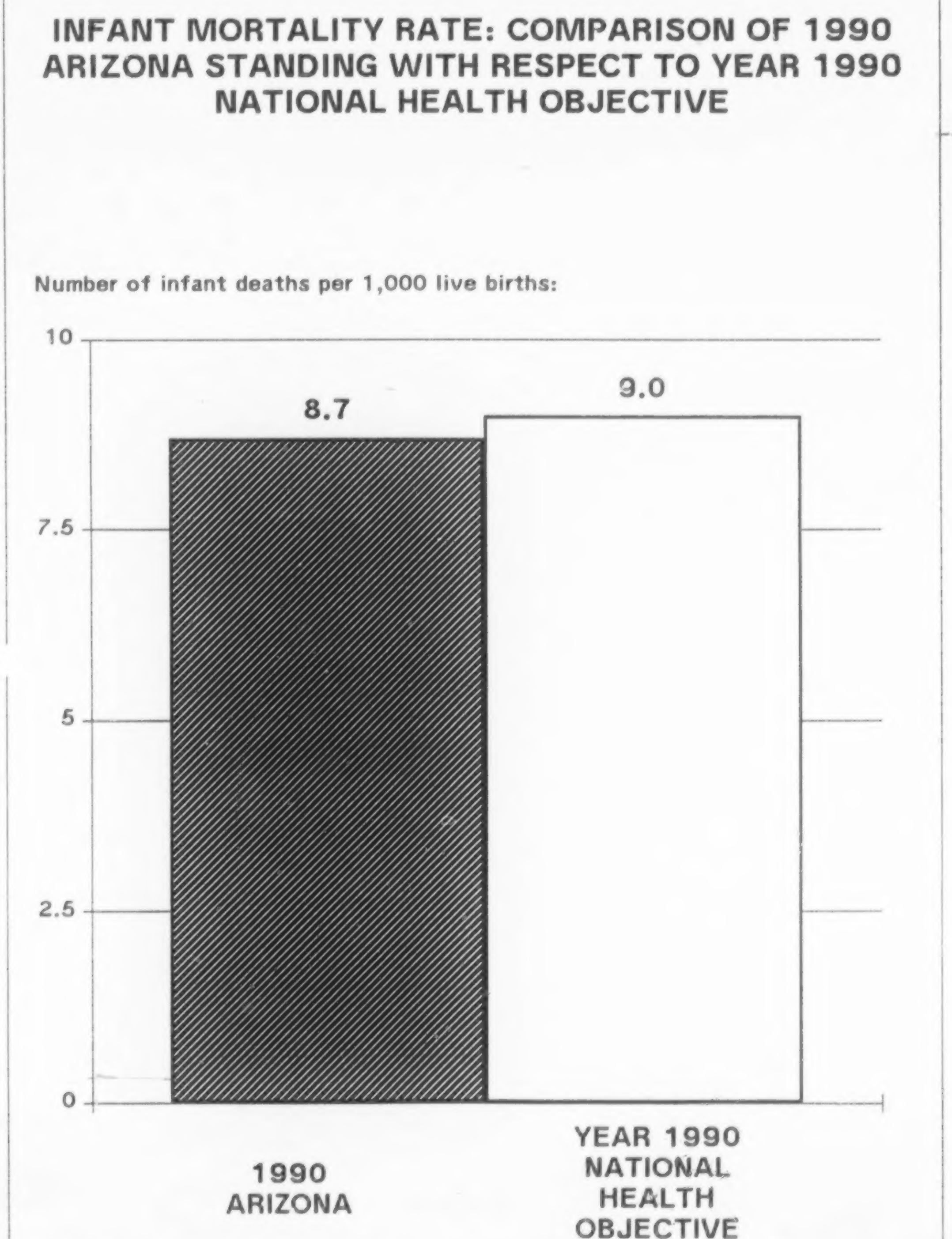

INFANT MORTALITY RATE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE
Number of infant deaths per 1,000 live births:
10
7.5
5
2.5
0
8.7
9.0
1990 ARIZONA
YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 61.

NEONATAL DEATH RATE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

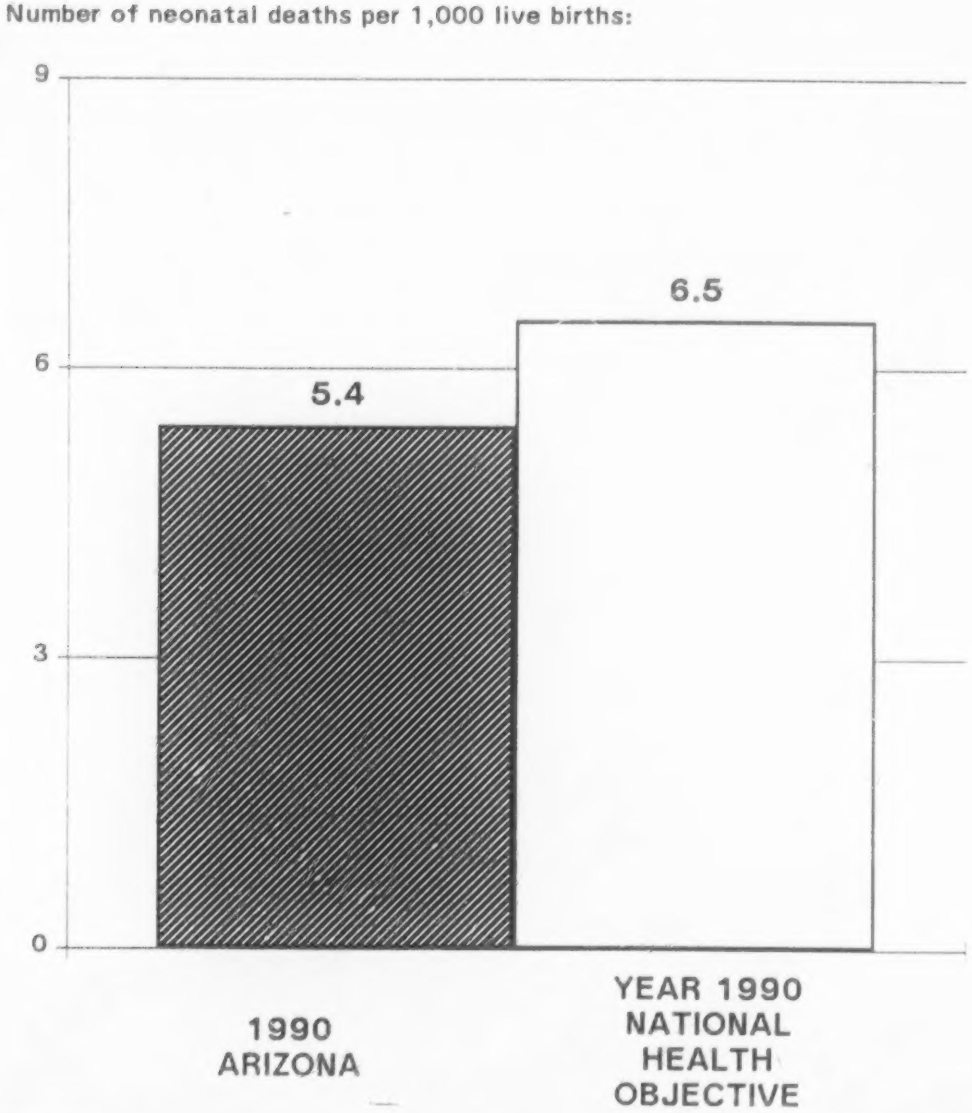
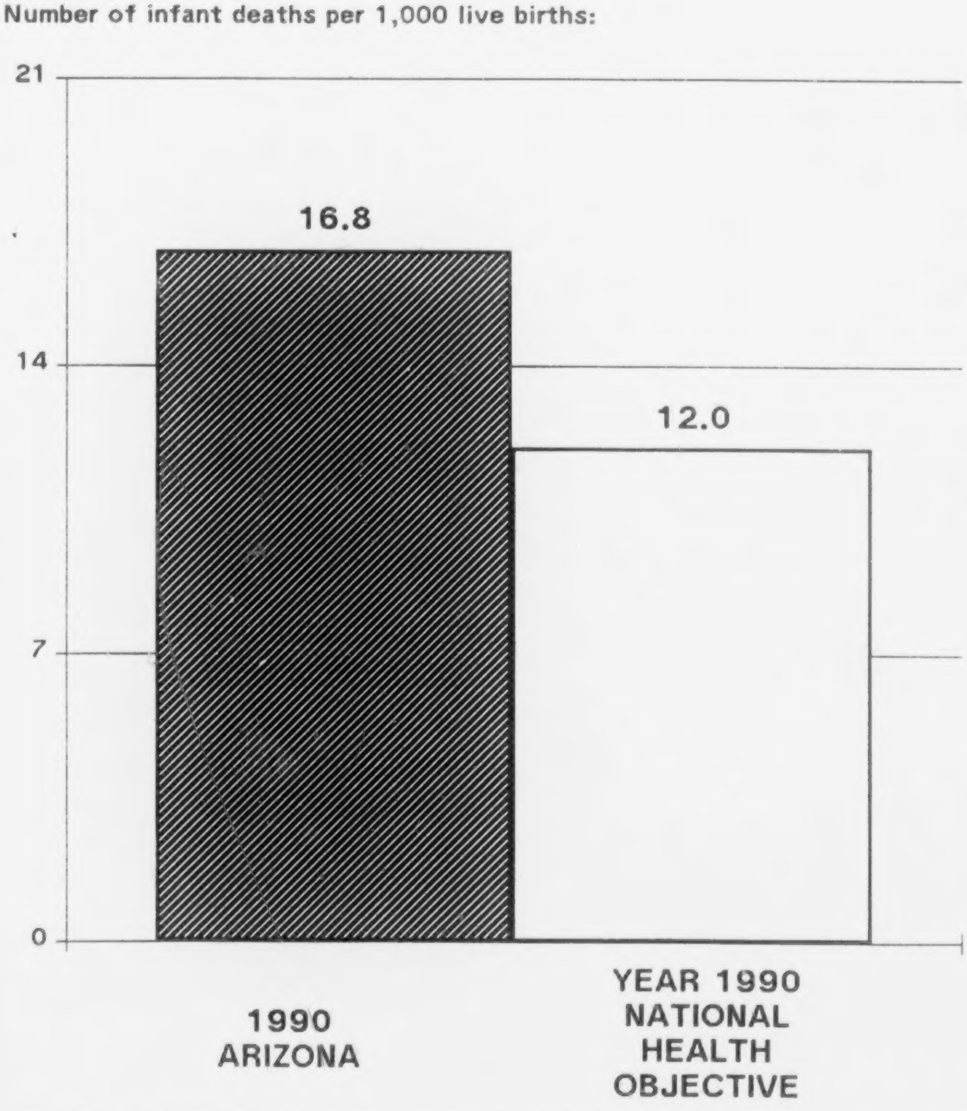


FIGURE 62.



BLACK INFANT MORTALITY RATE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 63.

DEATHS CAUSED BY MOTOR VEHICLE CRASHES: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

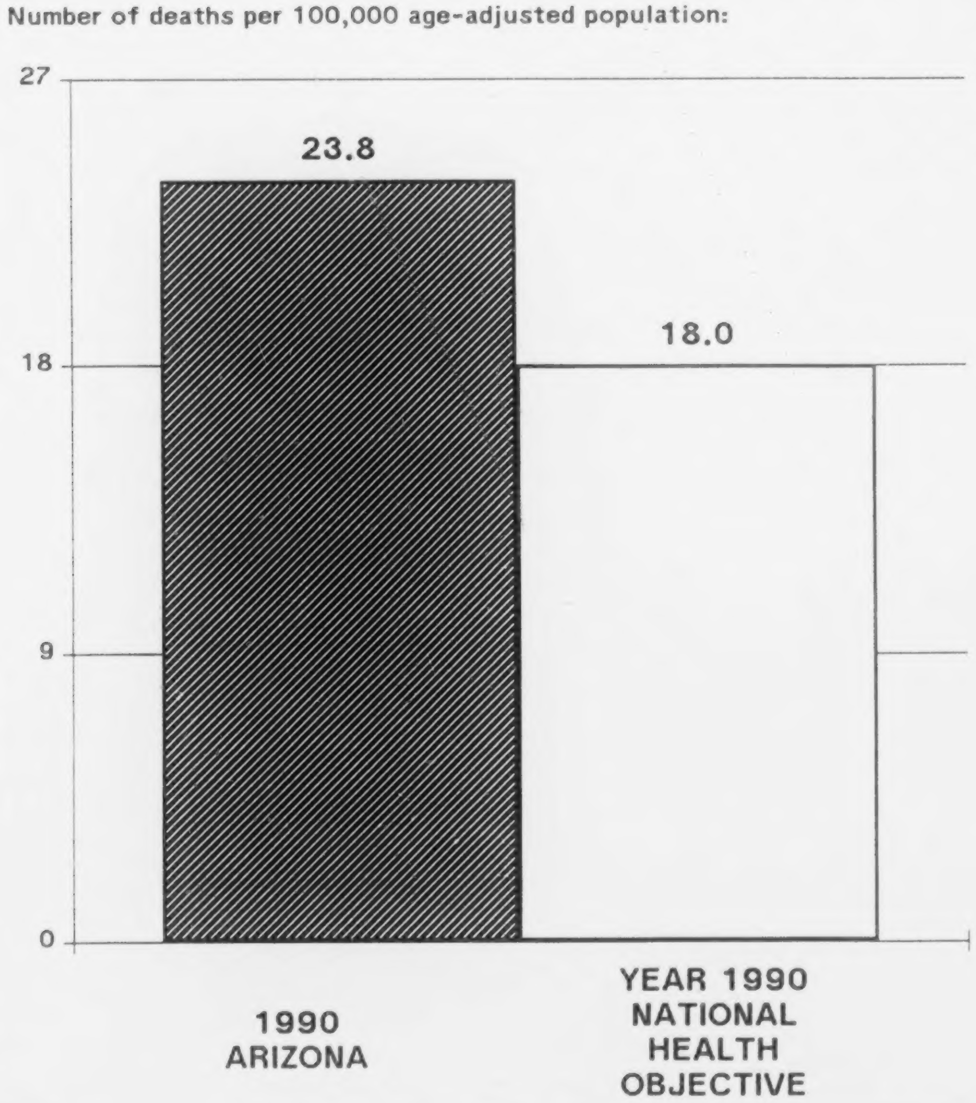


FIGURE 64.

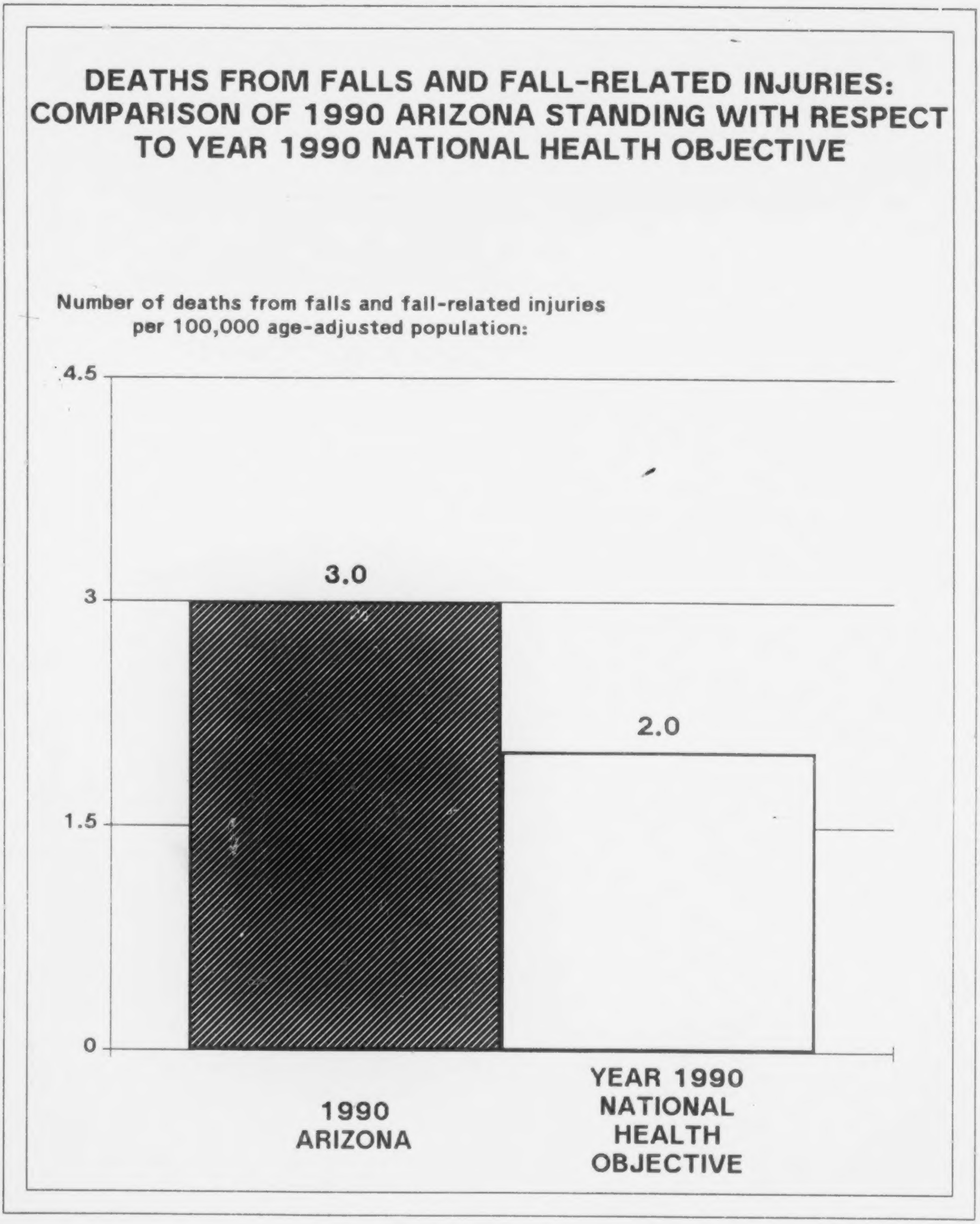
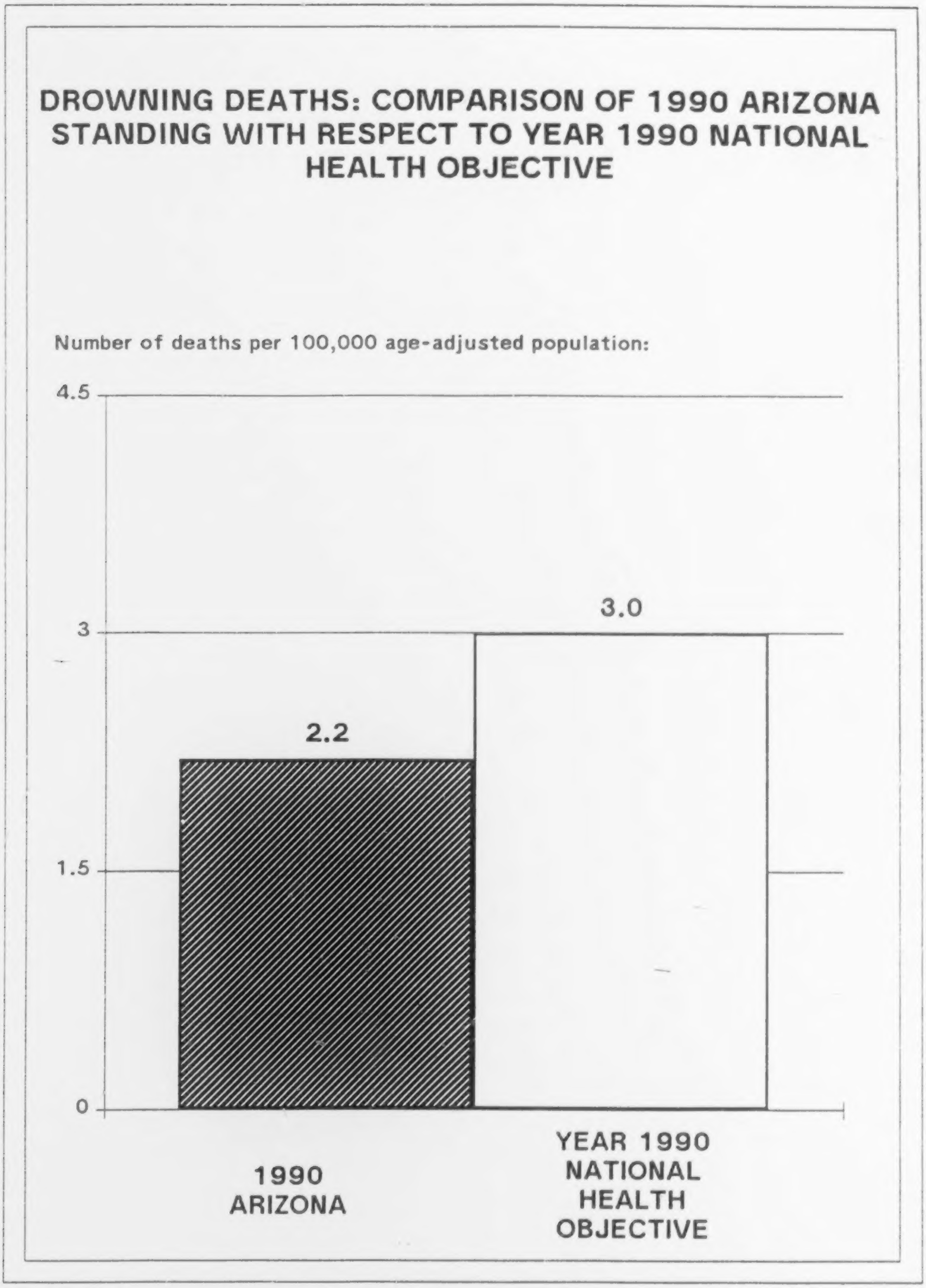

DEATHS FROM FALLS AND FALL-RELATED INJURIES: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE
Number of deaths from falls and fall-related injuries per 100,000 age-adjusted population:
4.5
3
1.5
0
3.0
2.0
1990 ARIZONA
YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 65.



DROWNING DEATHS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

FIGURE 66.

INCIDENCE RATE OF HEPATITIS B: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE

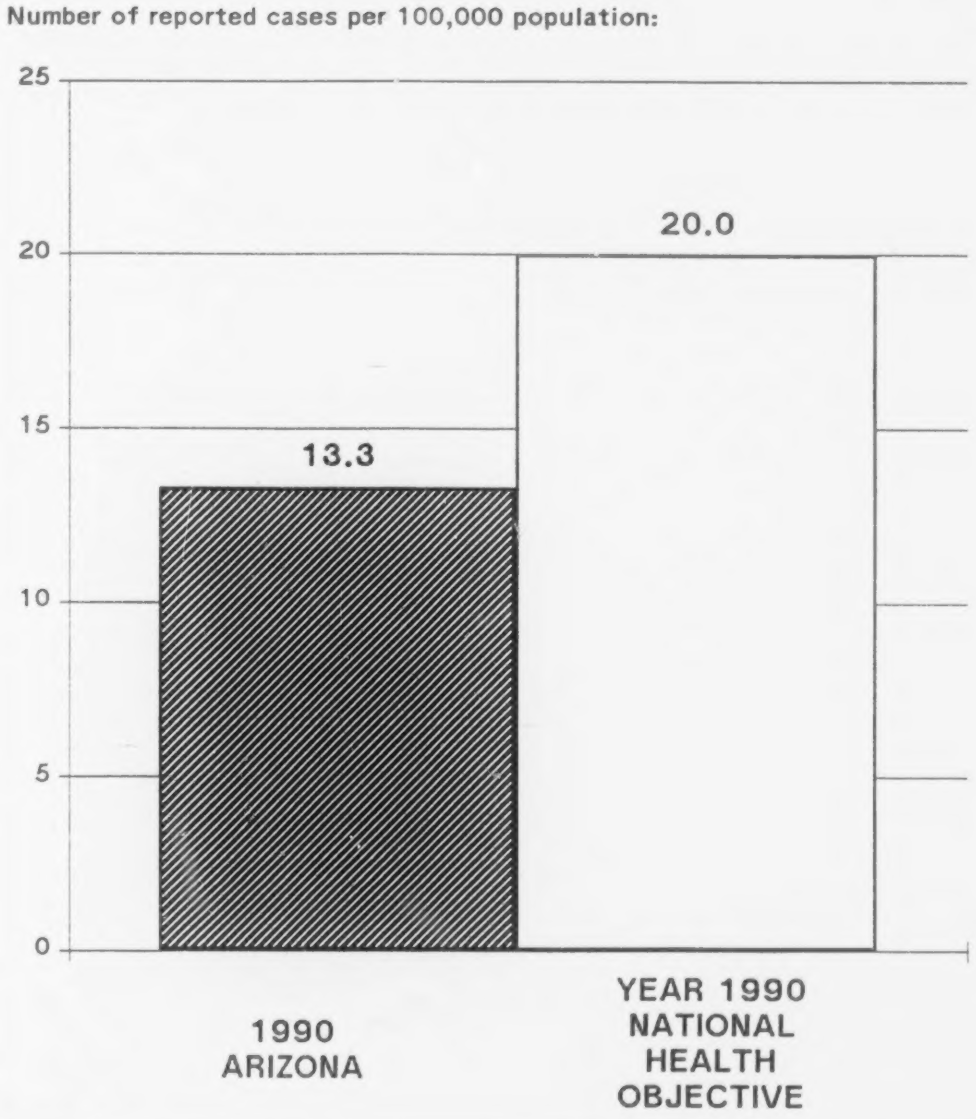
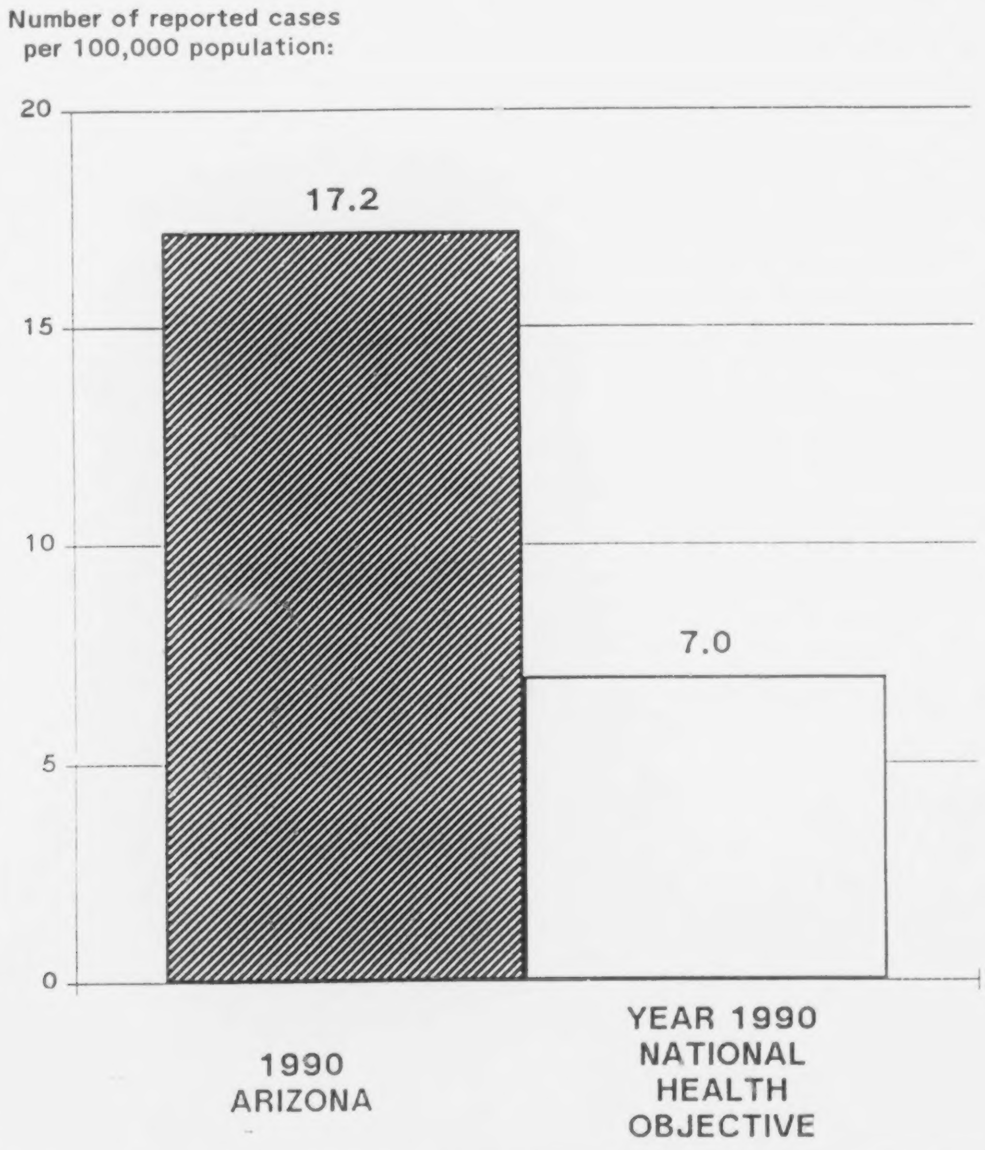


FIGURE 67.

INCIDENCE RATE OF PRIMARY AND SECONDARY SYPHILIS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 1990 NATIONAL HEALTH OBJECTIVE



1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 OBJECTIVES

FIGURE 68.

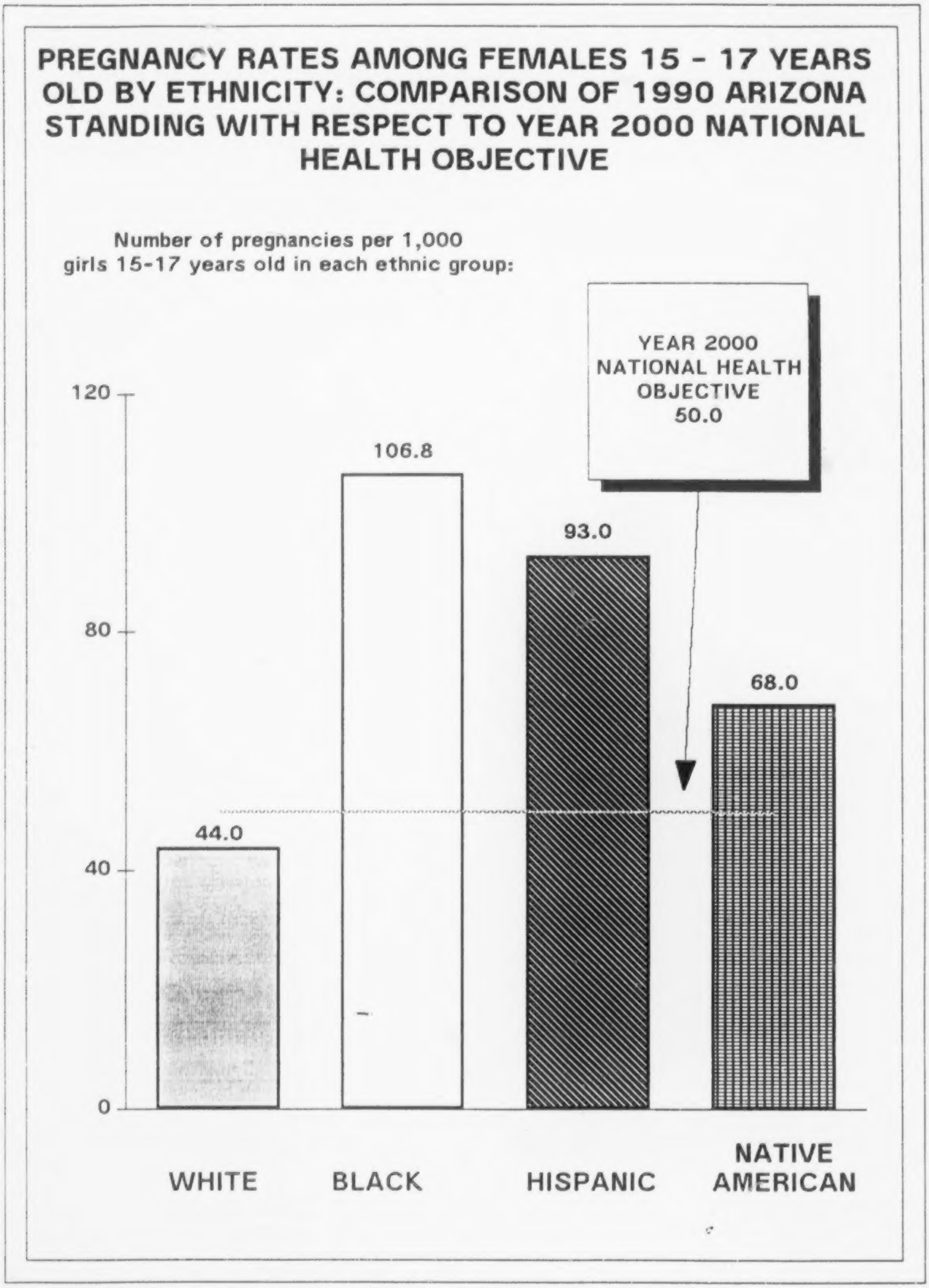

PREGNANCY RATES AMONG FEMALES 15 - 17 YEARS OLD BY ETHNICITY: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of pregnancies per 1,000 girls 15-17 years old in each ethnic group:
YEAR 2000 NATIONAL HEALTH OBJECTIVE 50.0
120
80
40
0
44.0
106.8
93.0
68.0
WHITE
BLACK
HISPANIC
NATIVE AMERICAN

FIGURE 69.

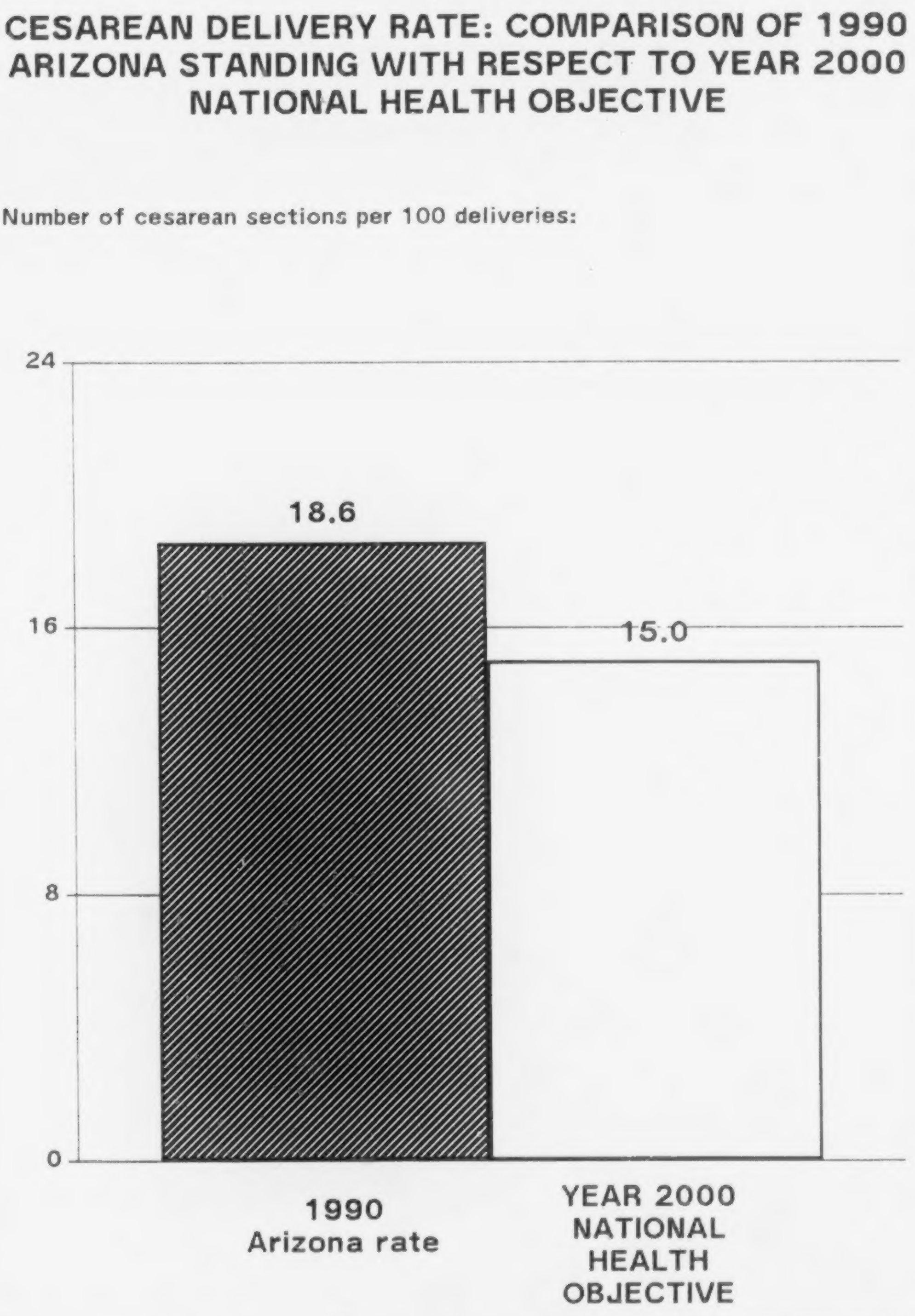
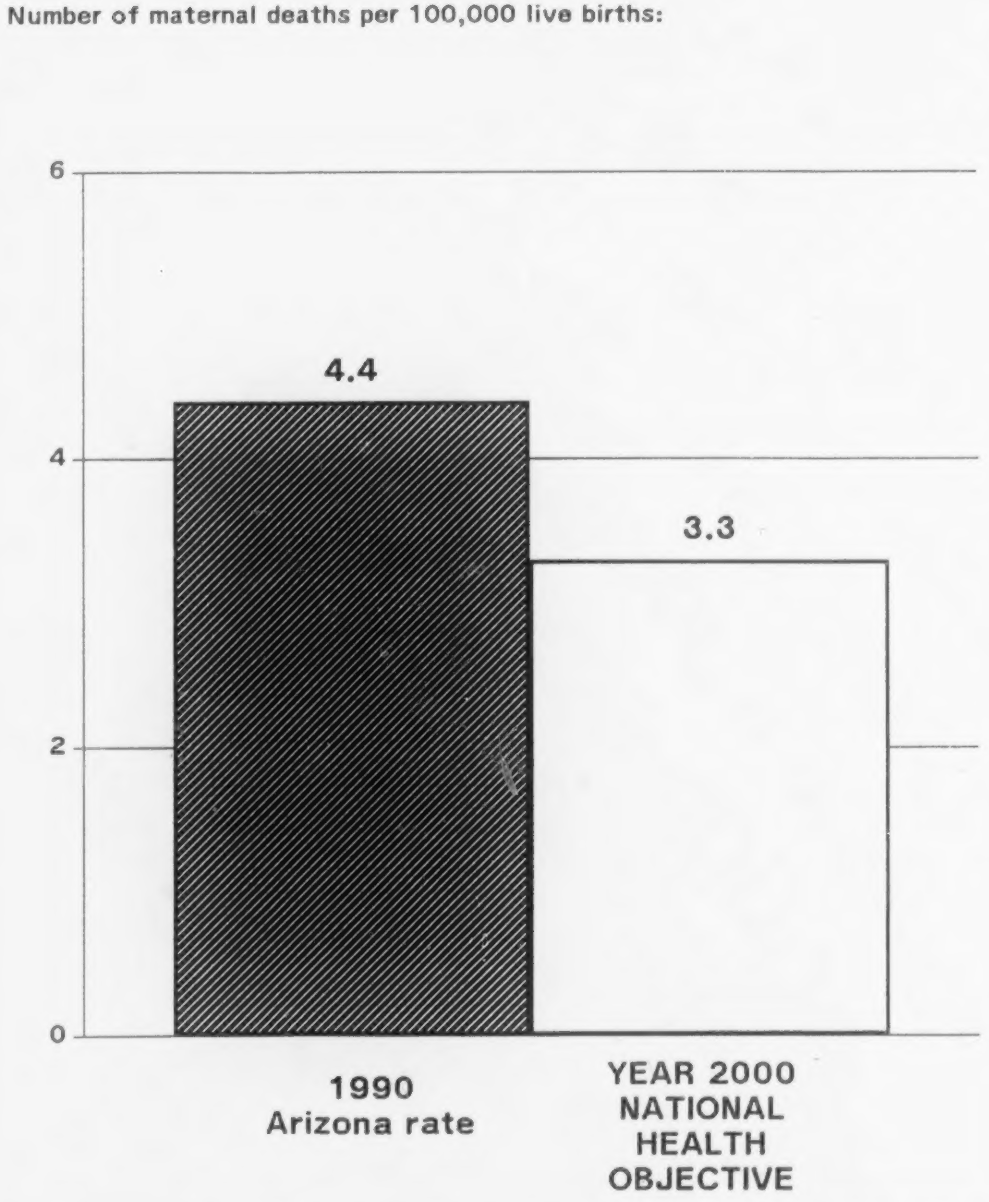

CESAREAN DELIVERY RATE: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of cesarean sections per 100 deliveries:
24
16
8
0
18.6
15.0
1990
Arizona rate
YEAR 2000
NATIONAL
HEALTH
OBJECTIVE

FIGURE 70.



MATERNAL DEATHS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 71.

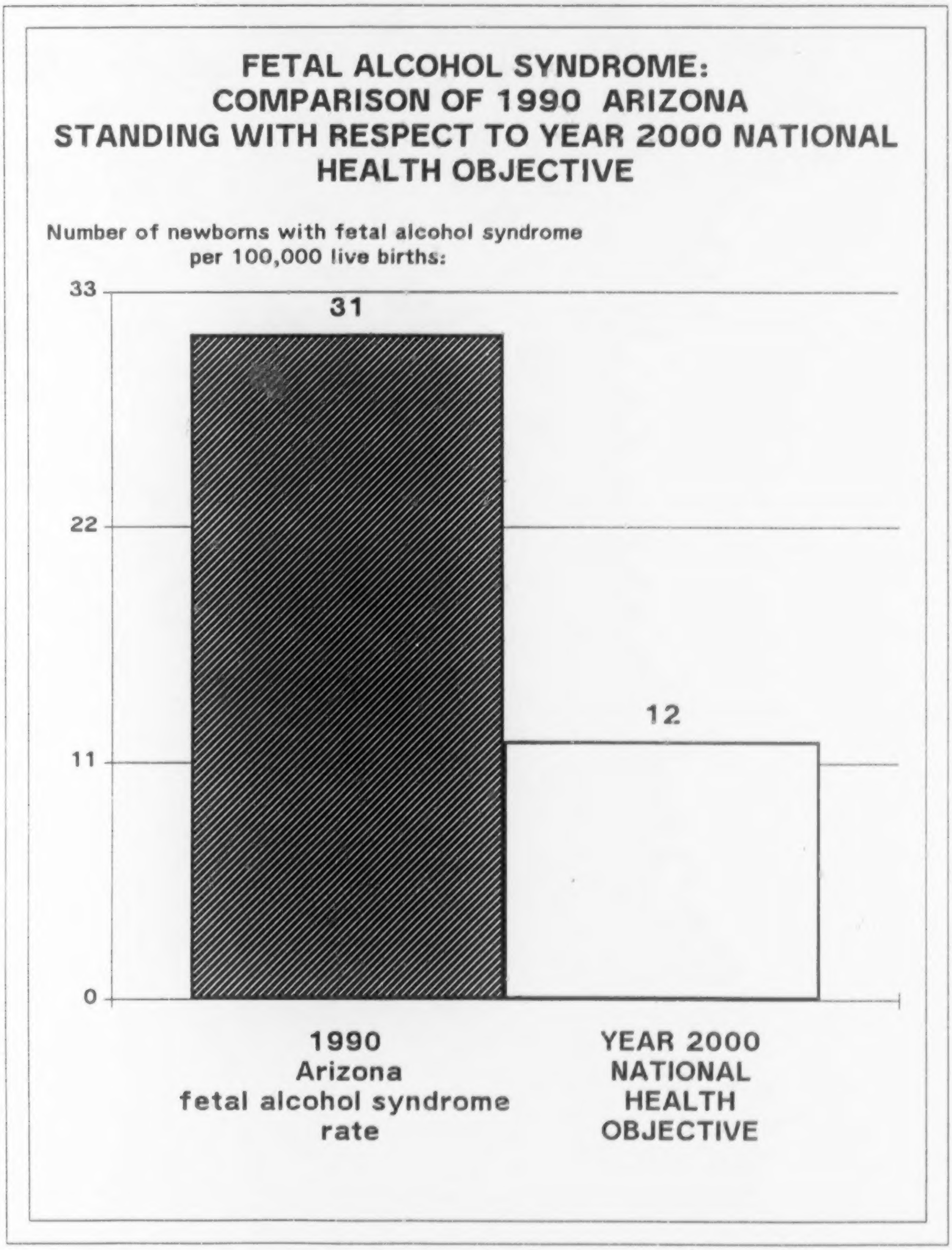

FETAL ALCOHOL SYNDROME:
COMPARISON OF 1990 ARIZONA
STANDING WITH RESPECT TO YEAR 2000 NATIONAL
HEALTH OBJECTIVE
Number of newborns with fetal alcohol syndrome per 100,000 live births:
33
22
11
0
31
12
1990 Arizona fetal alcohol syndrome rate
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 72.

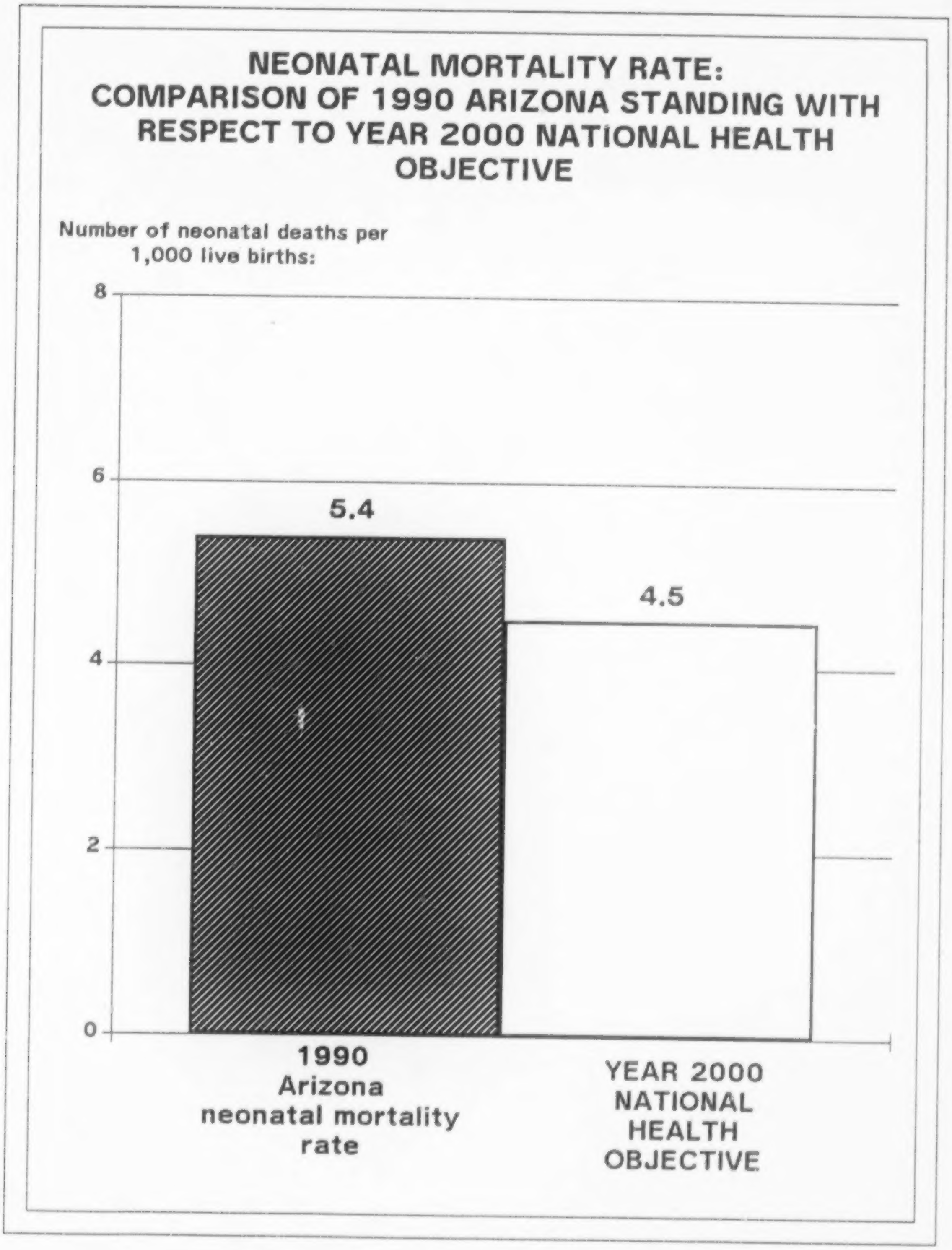

NEONATAL MORTALITY RATE:
COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of neonatal deaths per 1,000 live births:
8
6
4
2
0
5.4
4.5
1990 Arizona neonatal mortality rate
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 73.

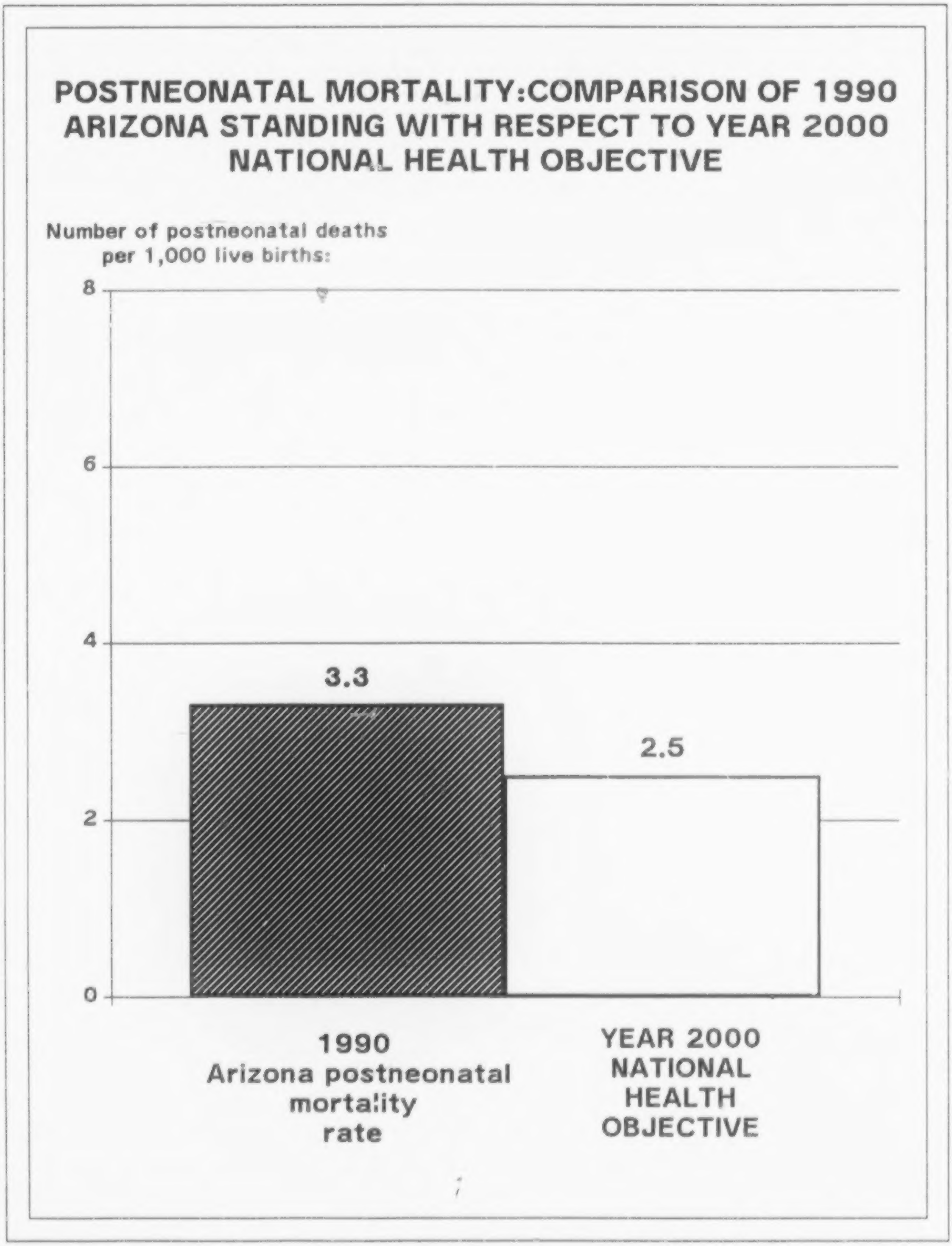

POSTNEONATAL MORTALITY:COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of postneonatal deaths per 1,000 live births:
8
6
4
2
0
3.3
2.5
1990 Arizona postneonatal mortality rate
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 74.

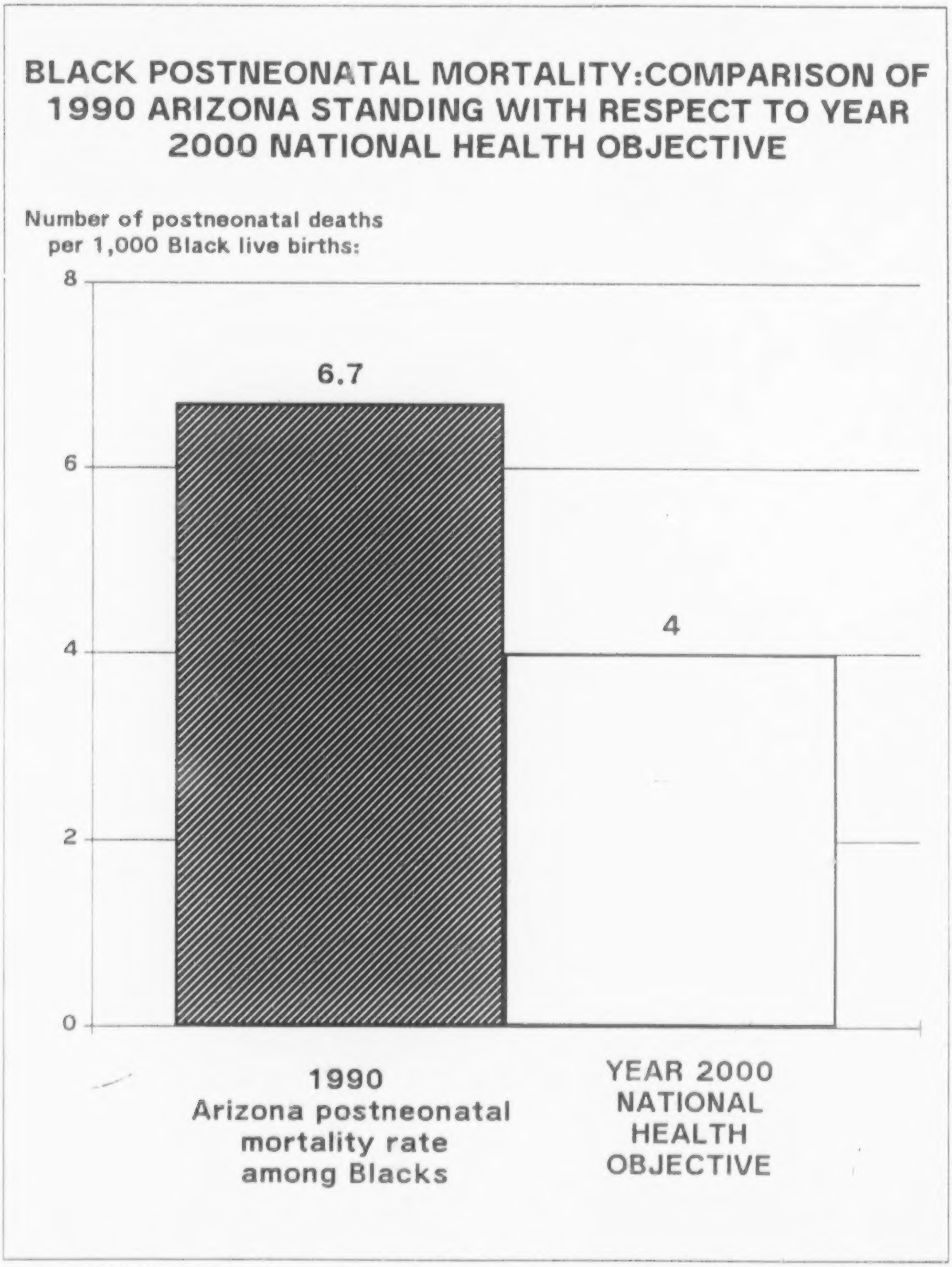

BLACK POSTNEONATAL MORTALITY:COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of postneonatal deaths per 1,000 Black live births:
8
6
4
2
0
6.7
4
1990 Arizona postneonatal mortality rate among Blacks
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 75.

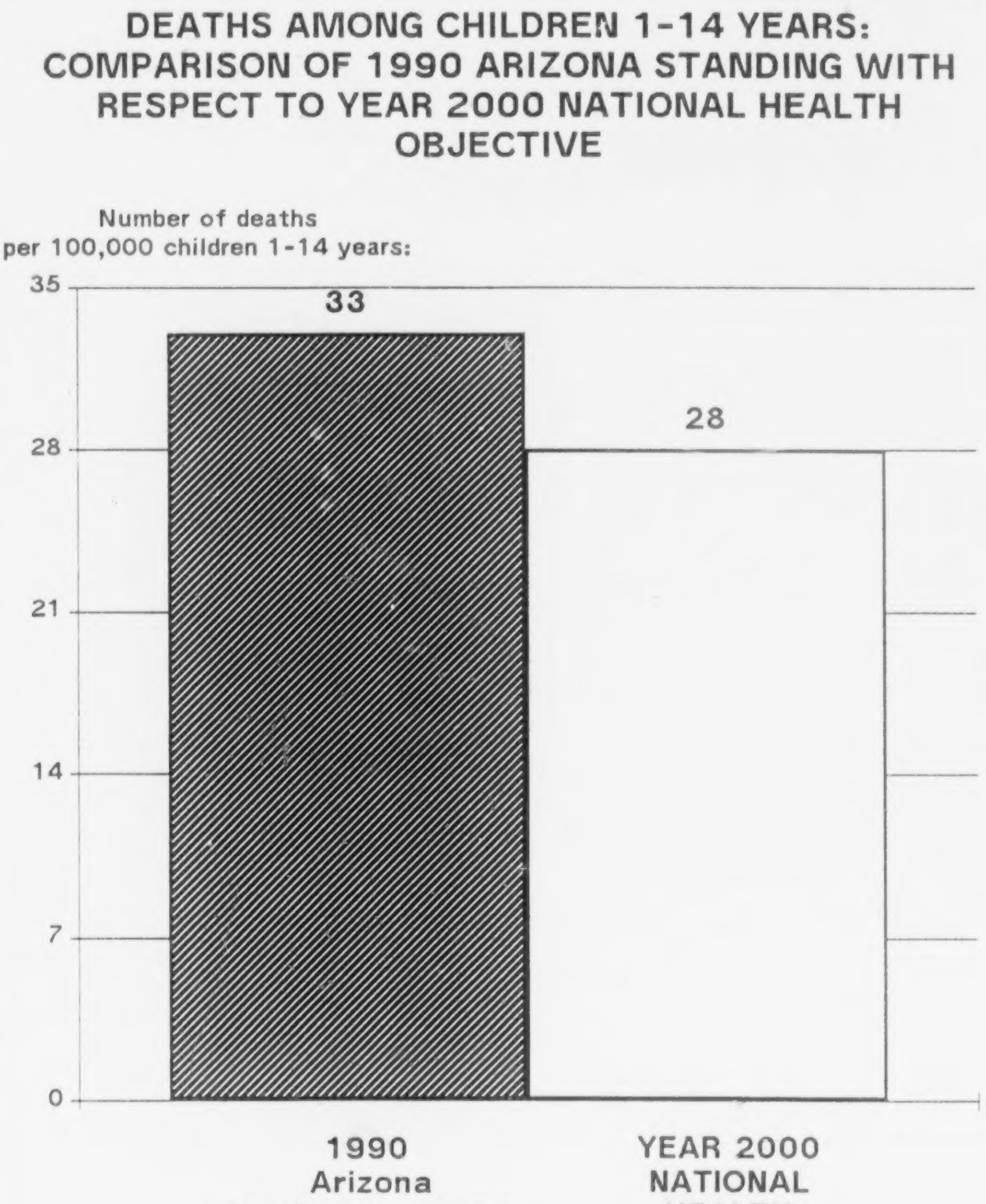

DEATHS AMONG CHILDREN 1-14 YEARS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of deaths per 100,000 children 1-14 years:
35
28
21
14
7
0
33
28
1990 Arizona death rate among children 1-14 years
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 76.

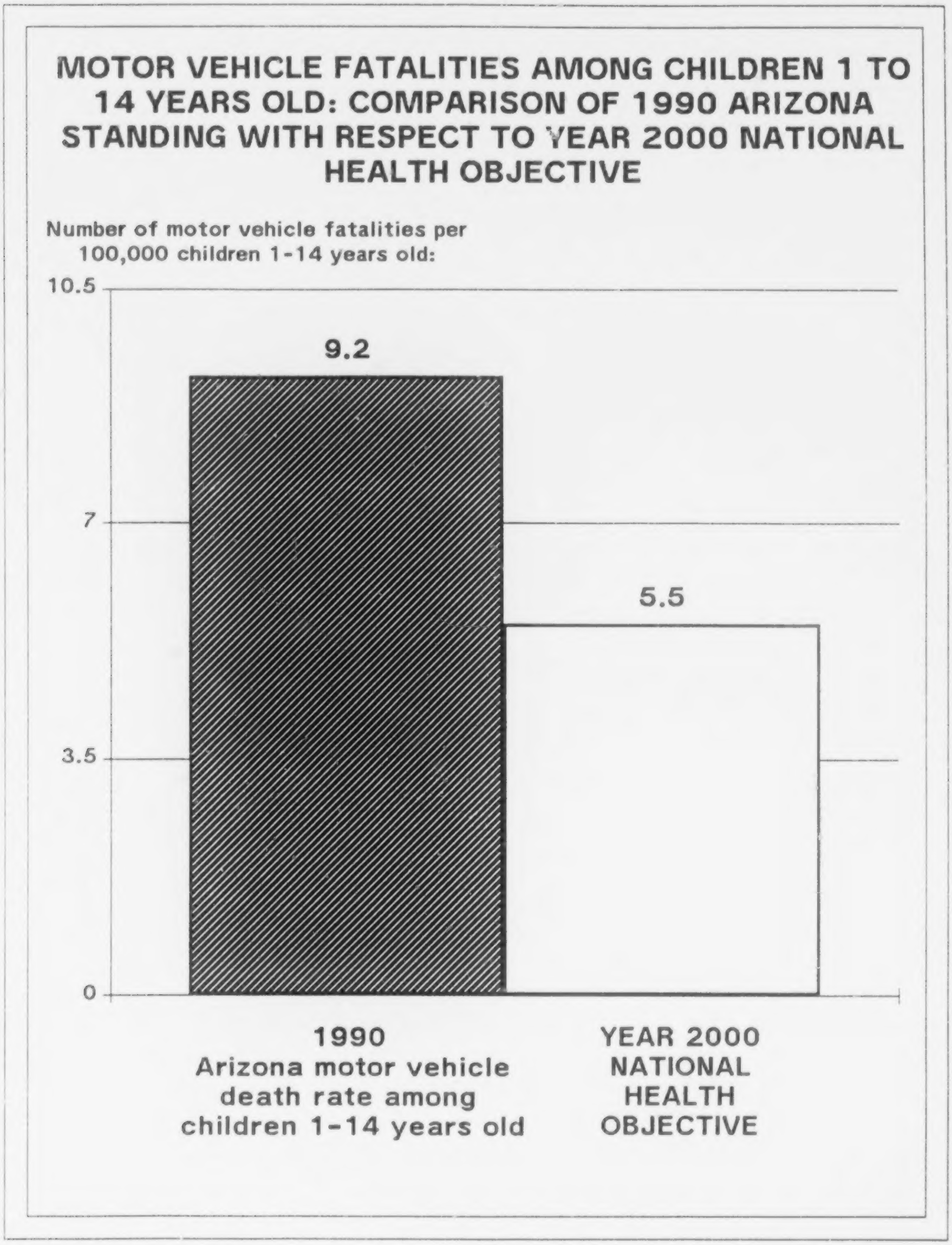
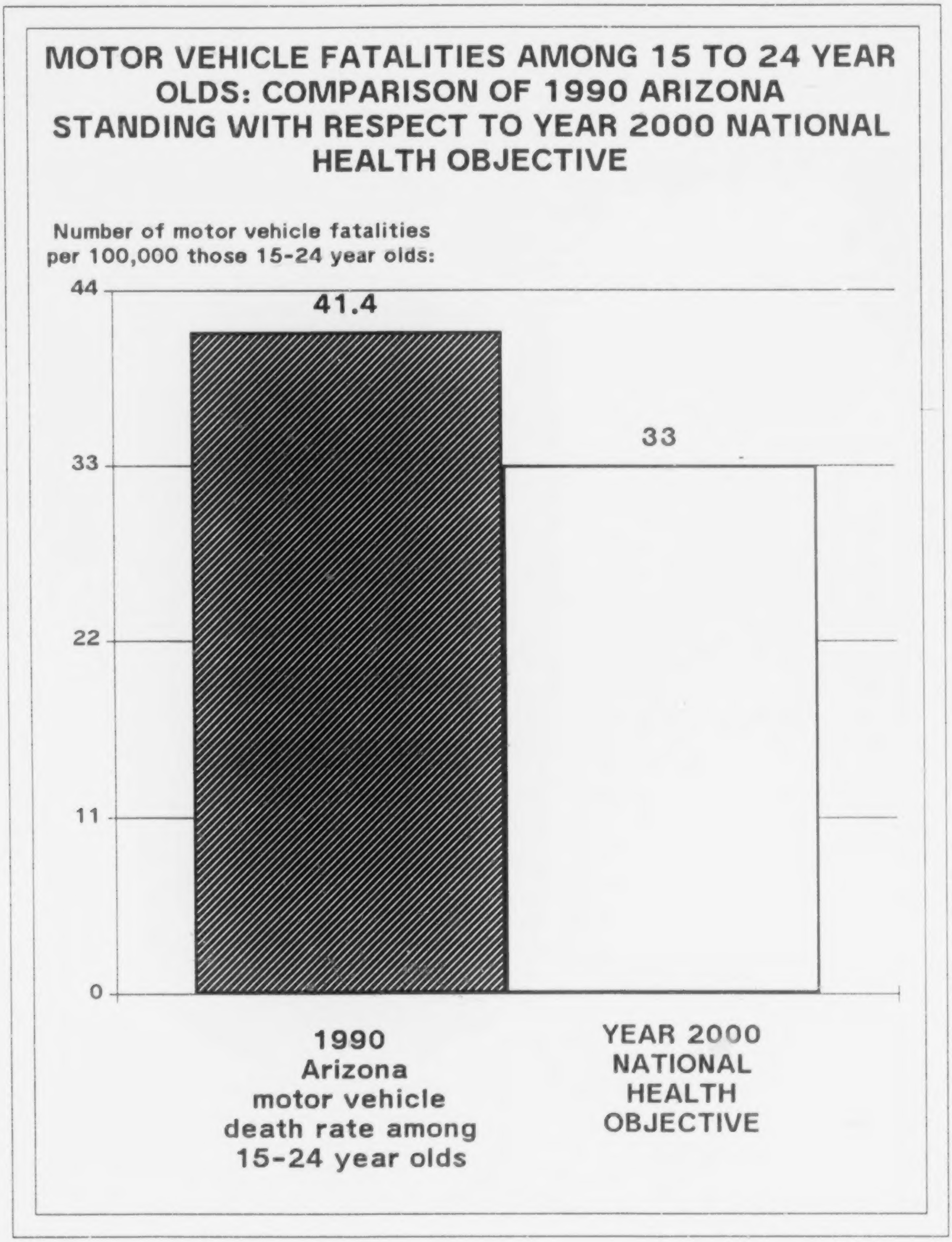

MOTOR VEHICLE FATALITIES AMONG CHILDREN 1 TO 14 YEARS OLD: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of motor vehicle fatalities per 100,000 children 1-14 years old:
10.5
7
3.5
0
9.2
5.5
1990 Arizona motor vehicle death rate among children 1-14 years old
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 77.



MOTOR VEHICLE FATALITIES AMONG 15 TO 24 YEAR OLDS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 78.

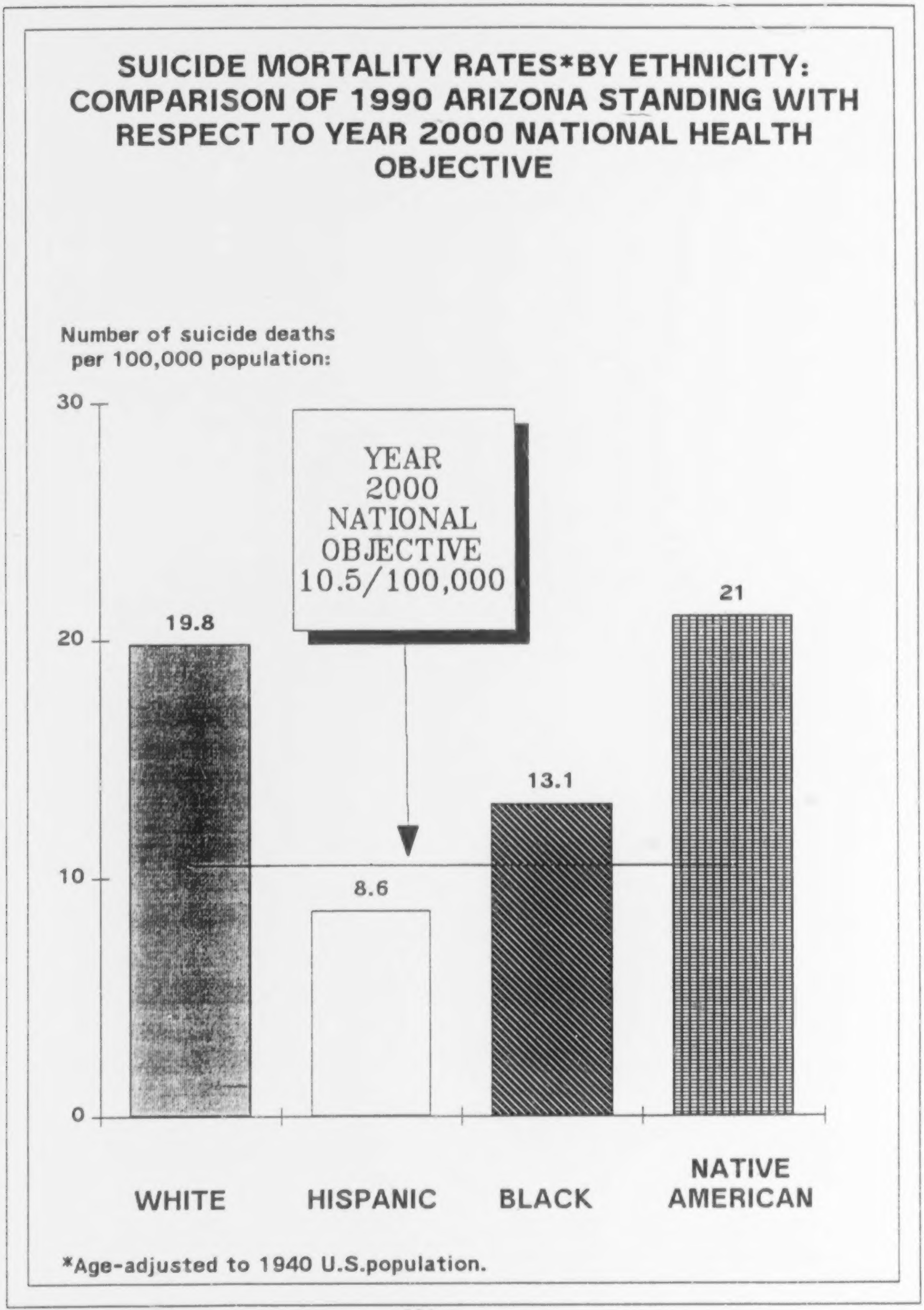
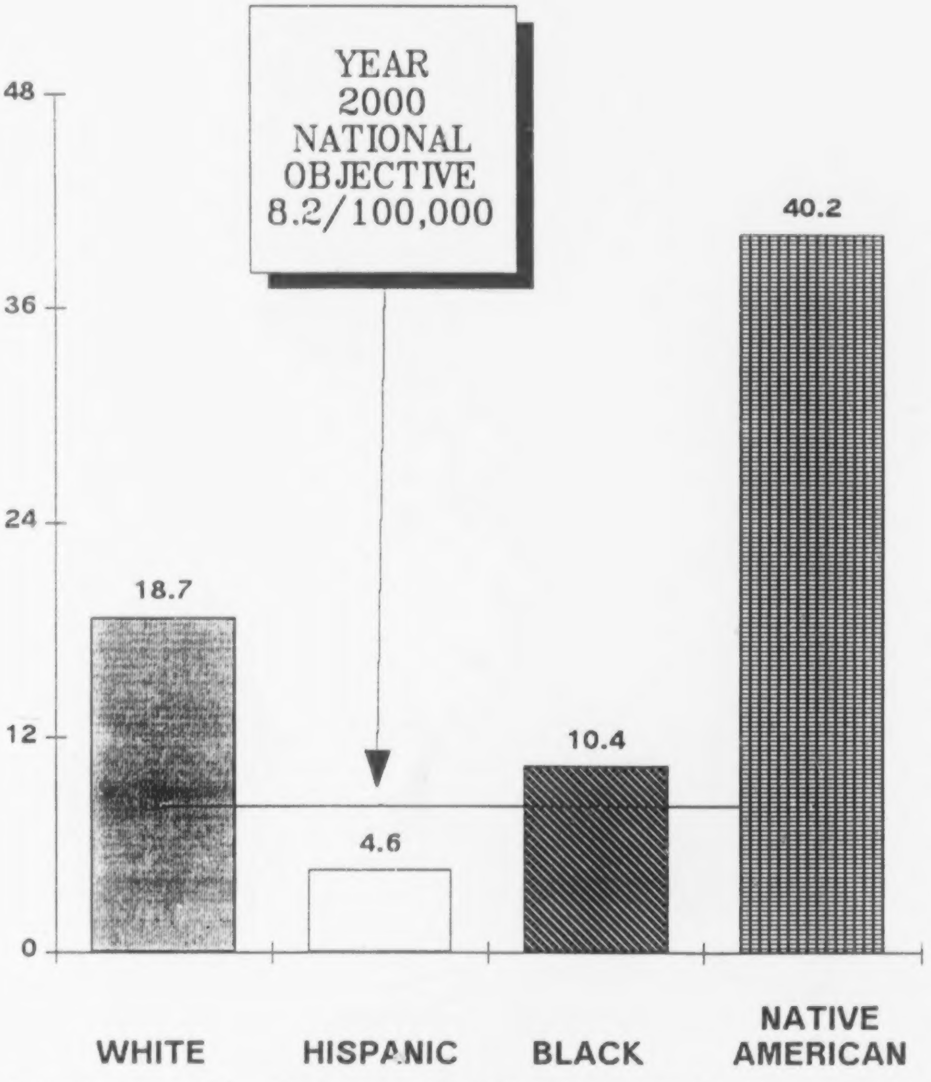

SUICIDE MORTALITY RATES*BY ETHNICITY: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of suicide deaths per 100,000 population:
30
20
10
0
YEAR 2000 NATIONAL OBJECTIVE 10.5/100,000
19.8
8.6
13.1
21
WHITE
HISPANIC
BLACK
NATIVE AMERICAN
*Age-adjusted to 1940 U.S.population.

FIGURE 79.

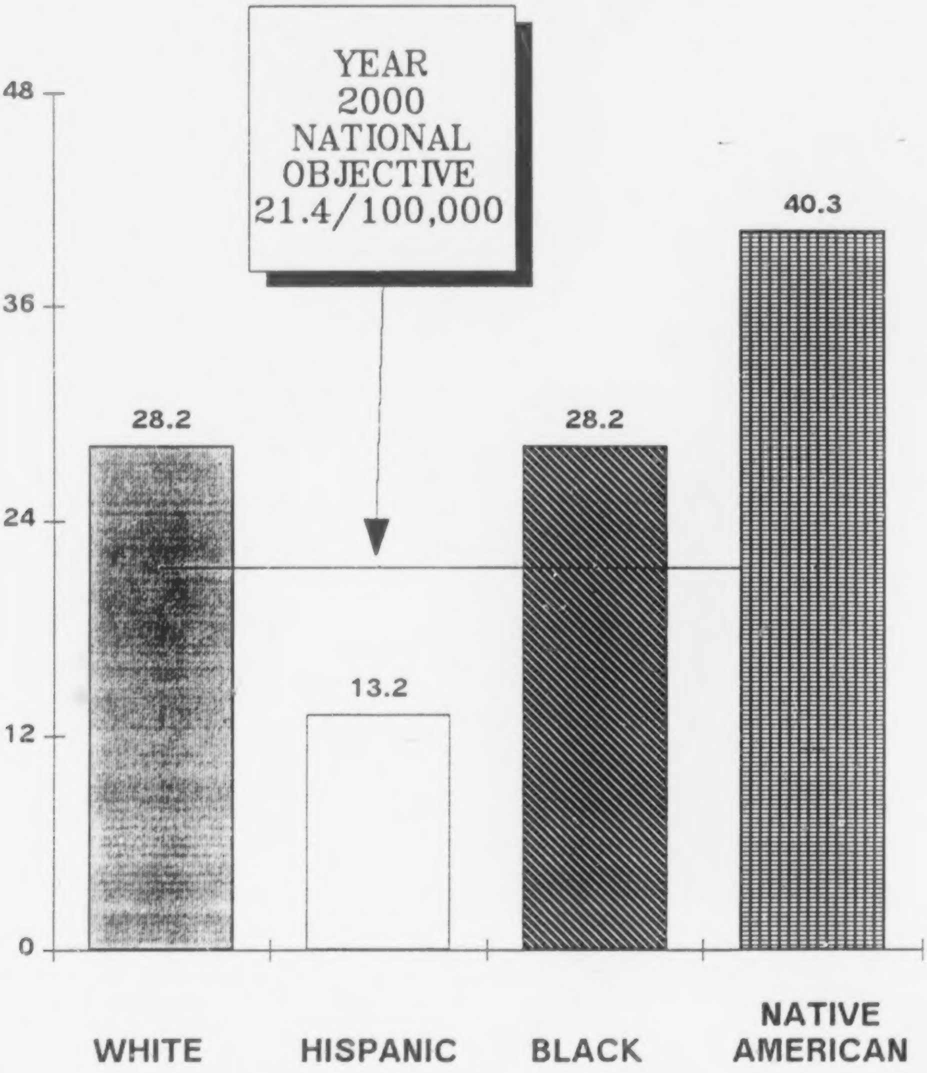
SUICIDE MORTALITY*AMONG ADOLESCENTS 15 TO 19 YEARS OLD BY ETHNIC GROUP: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE



*Number of suicide deaths per 100,000 adolescents 15-19 years old in specified ethnic group.

FIGURE 80.

SUICIDE MORTALITY*AMONG PERSONS 20 TO 34 YEARS OLD BY ETHNIC GROUP: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE



*Number of suicide deaths per 100,000 persons 20-34 years old in specified ethnic group.

FIGURE 81.

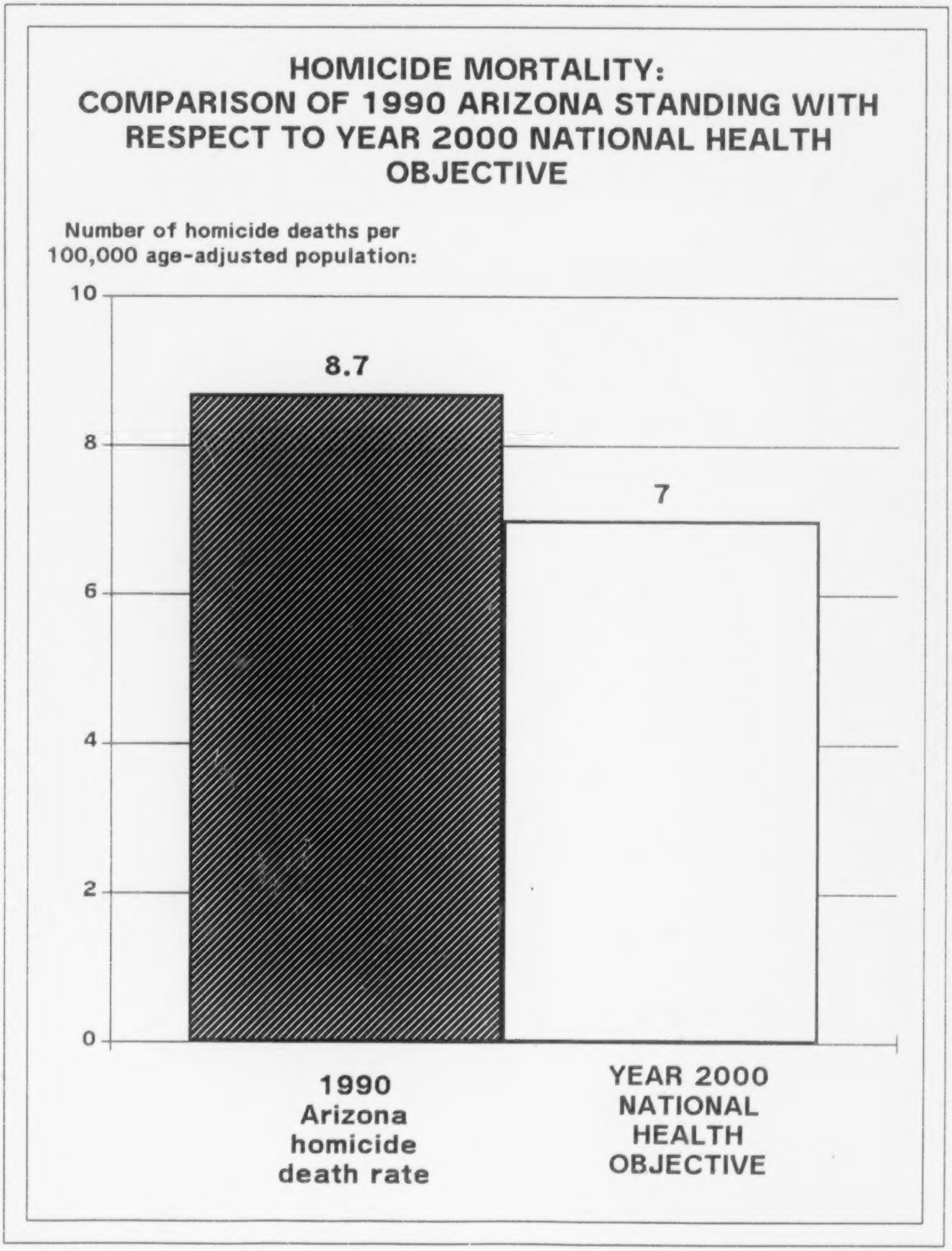

HOMICIDE MORTALITY: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of homicide deaths per 100,000 age-adjusted population:
10
8
6
4
2
0
8.7
7
1990 Arizona homicide death rate
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 82.

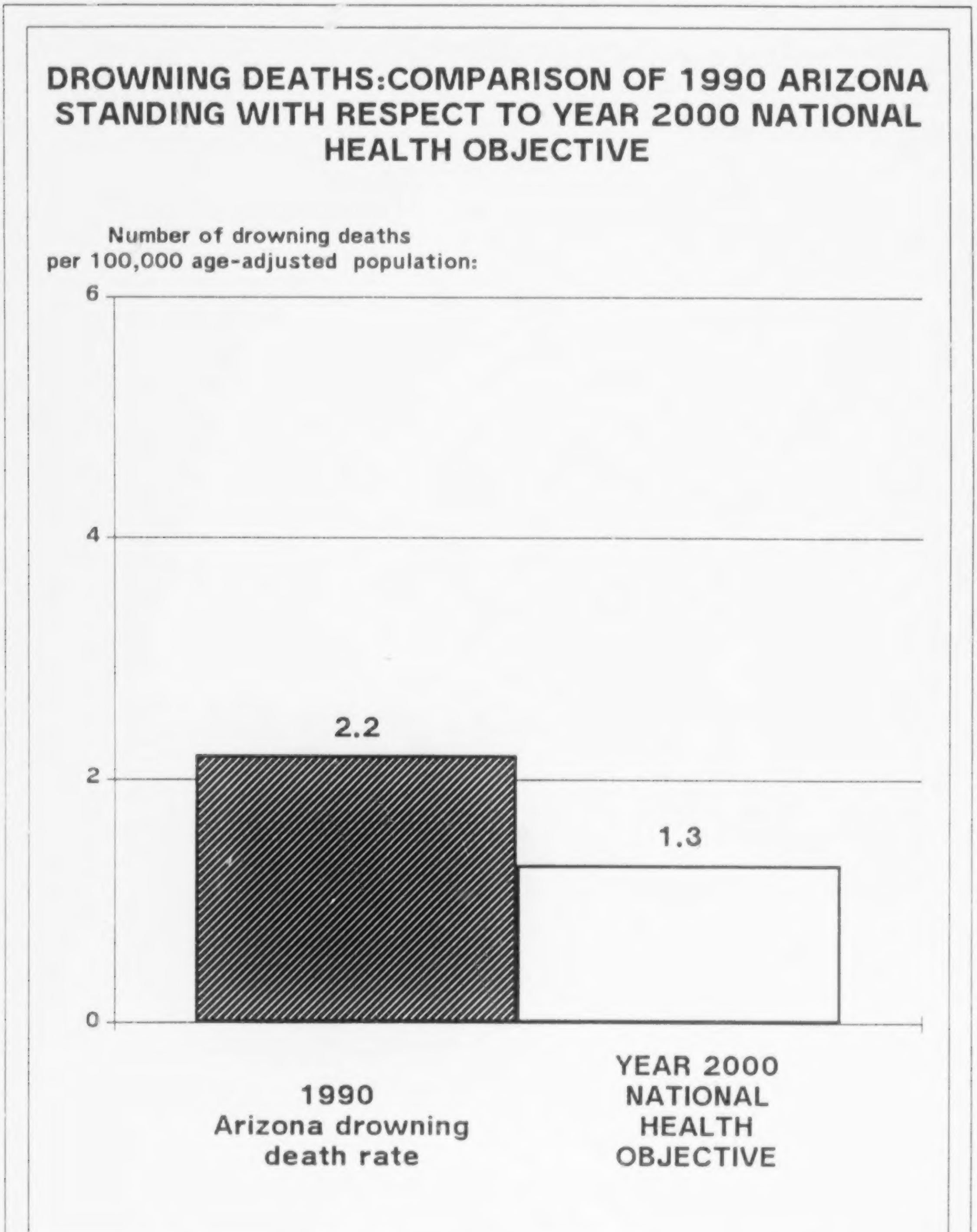
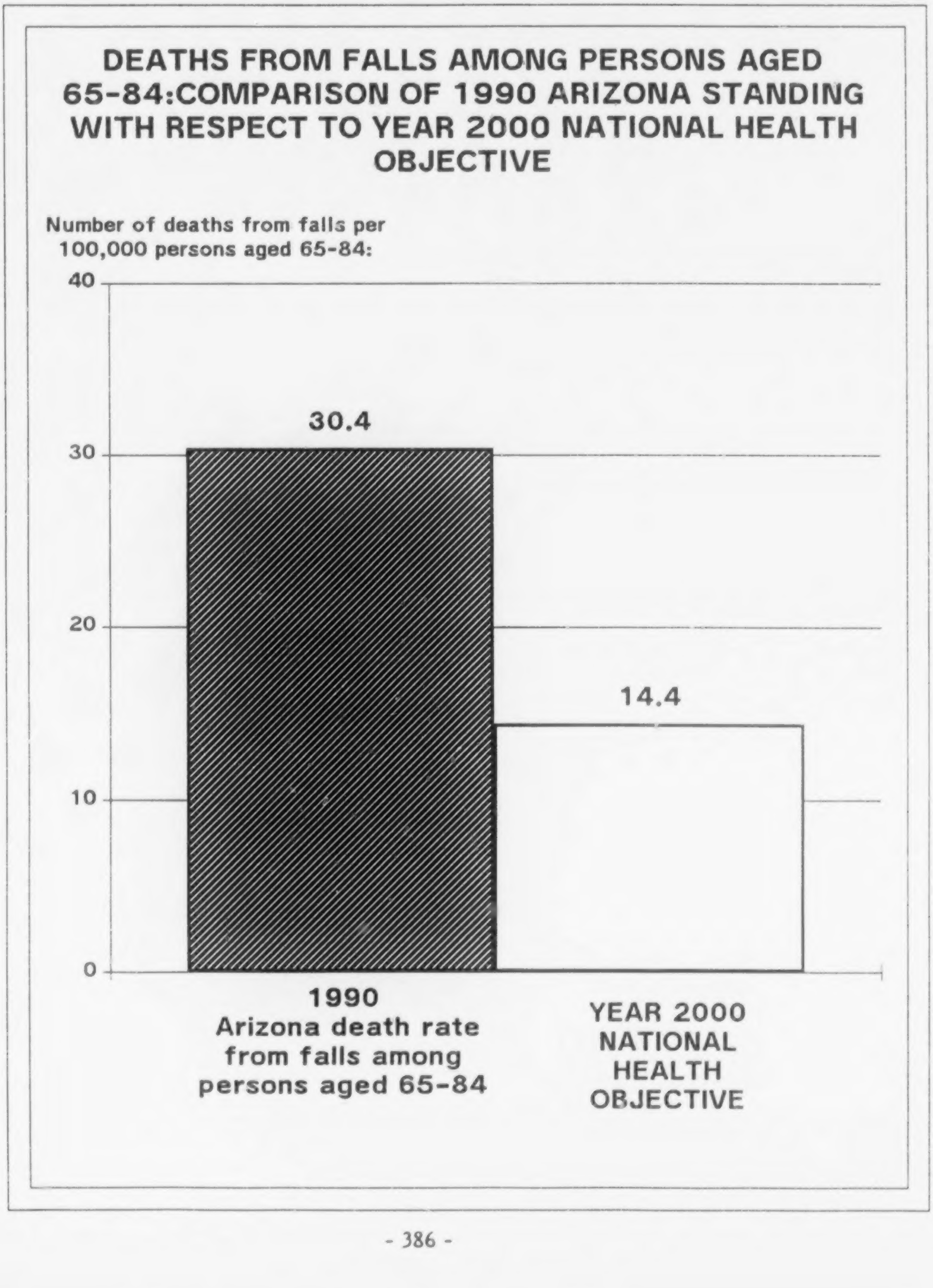

DROWNING DEATHS:COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE
Number of drowning deaths per 100,000 age-adjusted population:
6
4
2
0
2.2
1.3
1990 Arizona drowning death rate
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 83.



DEATHS FROM FALLS AMONG PERSONS AGED 65-84:COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 84.

FIREARM-RELATED DEATHS:COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE

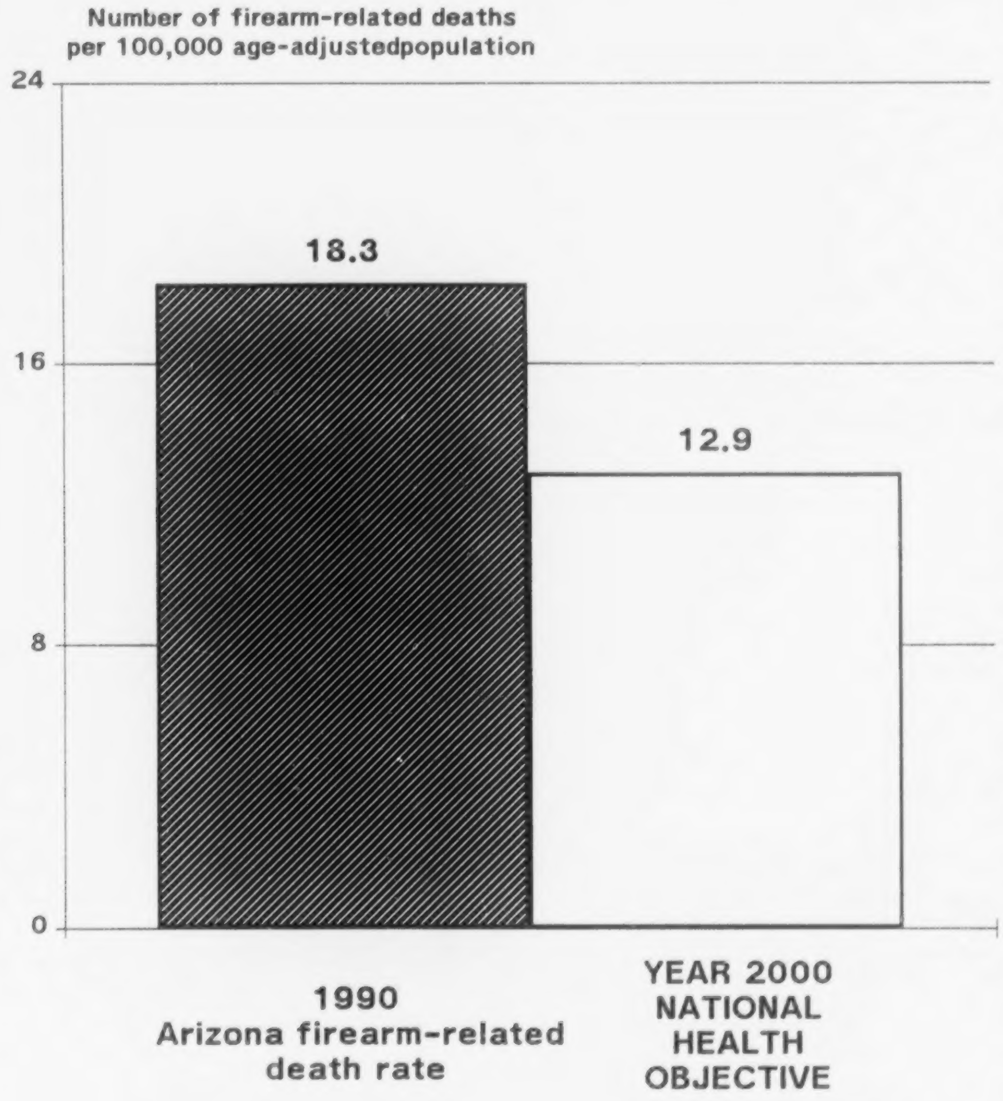
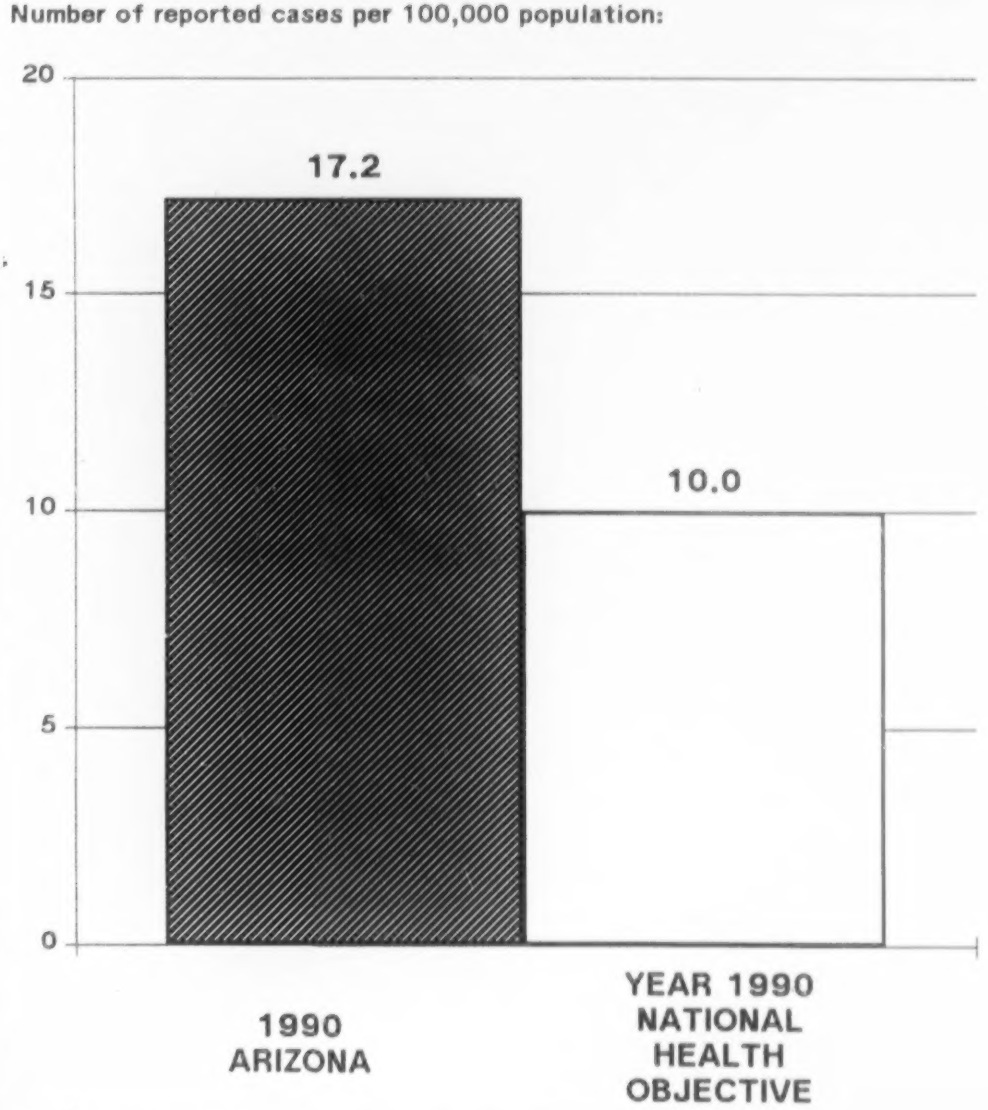


FIGURE 85.

INCIDENCE RATE OF PRIMARY AND SECONDARY SYPHILIS: COMPARISON OF 1990 ARIZONA STANDING WITH RESPECT TO YEAR 2000 NATIONAL HEALTH OBJECTIVE



Part IV

RANK ORDER OF COUNTIES ON SELECTED INDICATORS OF HEALTH STATUS IN 1990

FIGURE 86.

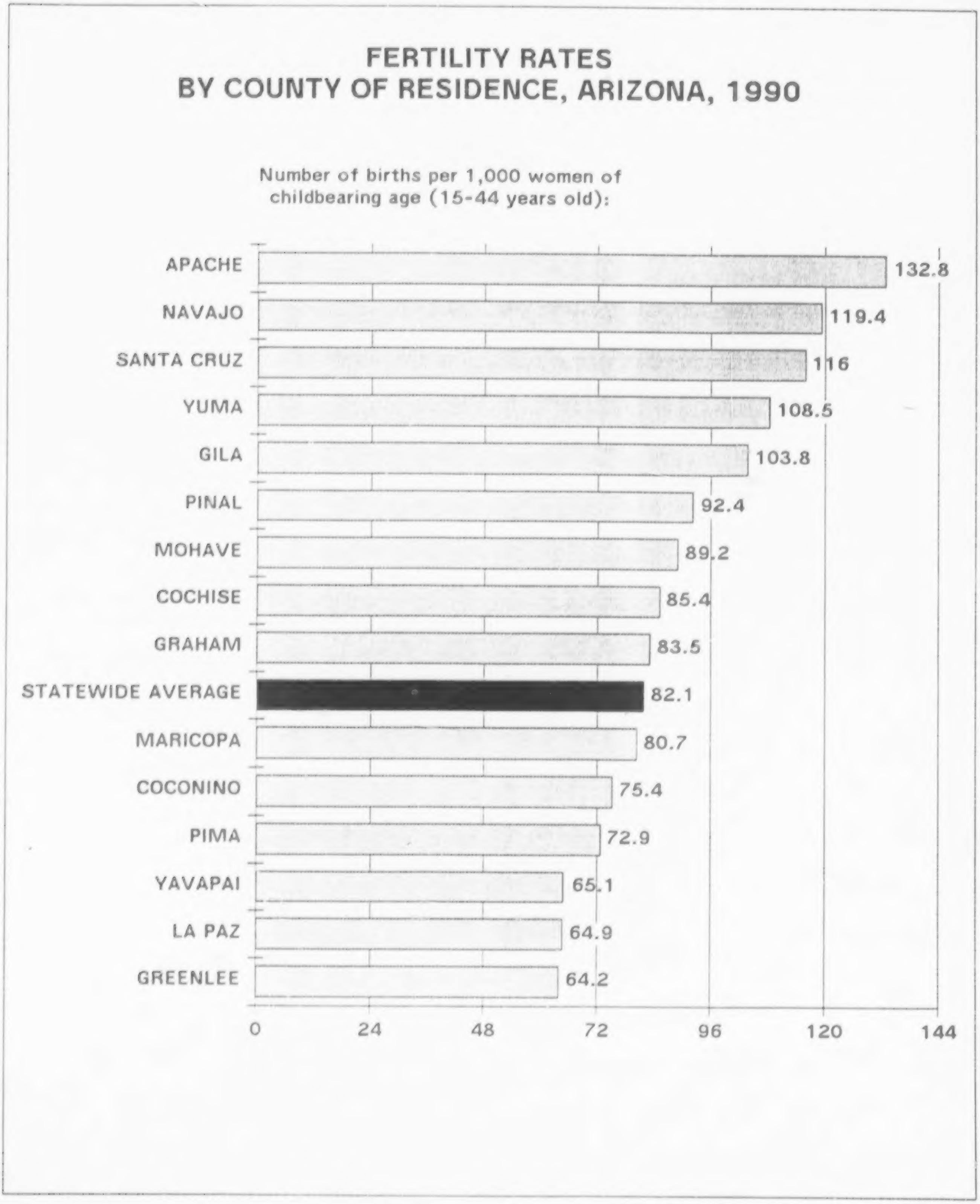
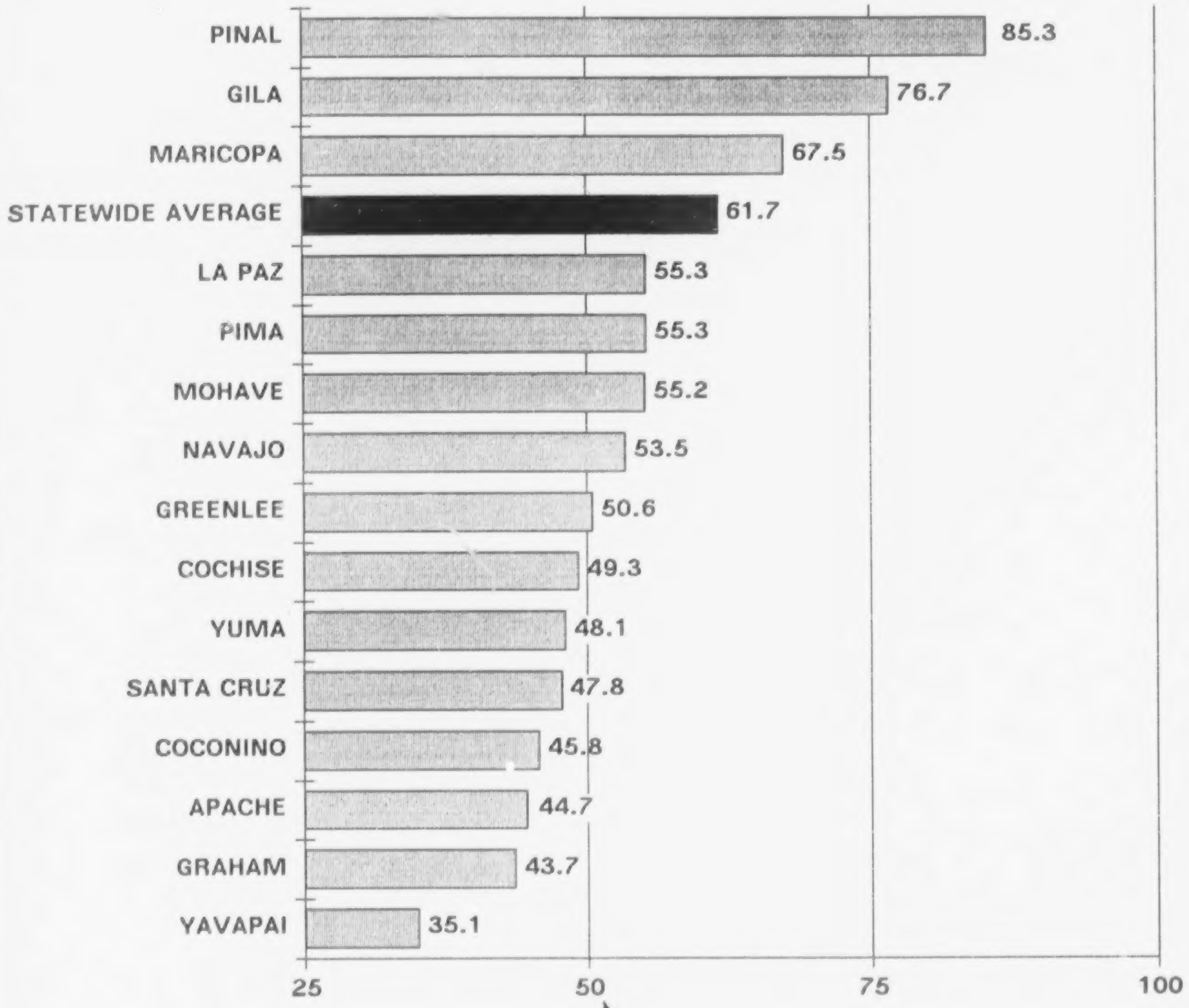

FERTILITY RATES
BY COUNTY OF RESIDENCE, ARIZONA, 1990
Number of births per 1,000 women of childbearing age (15-44 years old):
APACHE 132.8
NAVAJO 119.4
SANTA CRUZ 116
YUMA 108.5
GILA 103.8
PINAL 92.4
MOHAVE 89.2
COCHISE 85.4
GRAHAM 83.5
STATEWIDE AVERAGE 82.1
MARICOPA 80.7
COCONINO 75.4
PIMA 72.9
YAVAPAI 65.1
LA PAZ 64.9
GREENLEE 64.2
0
24
48
72
96
120
144

FIGURE 87.

PREGNANCY RATES AMONG GIRLS 15 TO 17 YEARS OLD BY COUNTY OF RESIDENCE, ARIZONA, 1990

The sum of live births+abortions+stillbirths(or fetal deaths) per 1,000 girls 15-17 years old:



YEAR 2000
NATIONAL HEALTH
OBJECTIVE
50.0/1,000

FIGURE 88.

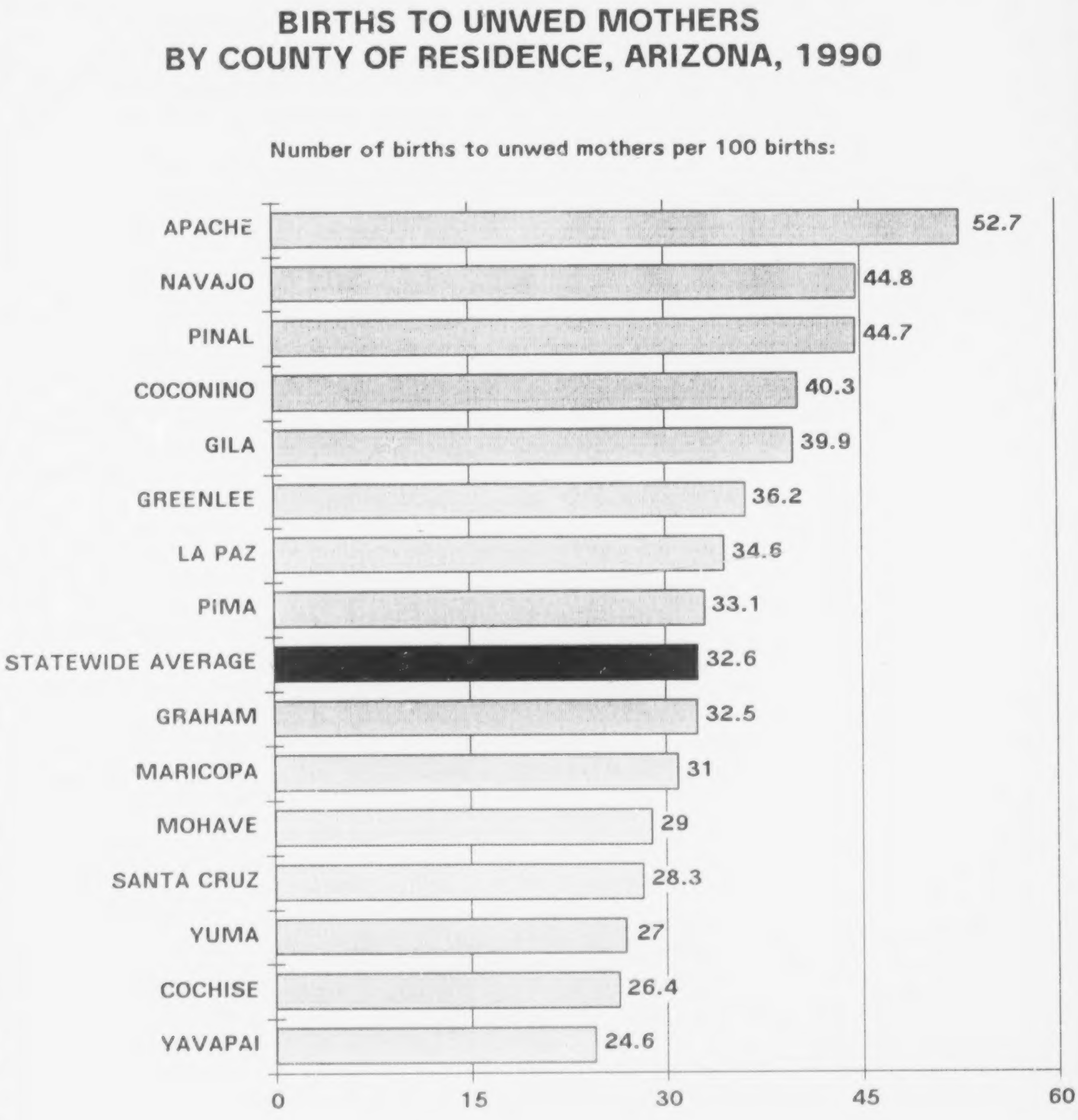

BIRTHS TO UNWED MOTHERS
BY COUNTY OF RESIDENCE, ARIZONA, 1990
Number of births to unwed mothers per 100 births:
APACHE 52.7
NAVAJO 44.8
PINAL 44.7
COCONINO 40.3
GILA 39.9
GREENLEE 36.2
LA PAZ 34.6
PIMA 33.1
STATEWIDE AVERAGE 32.6
GRAHAM 32.5
MARICOPA 31
MOHAVE 29
SANTA CRUZ 28.3
YUMA 27
COCHISE 26.4
YAVAPAI 24.6
0
15
30
45
60

FIGURE 89.

SHARE OF DELIVERIES PAID BY THE ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM AND/OR THE INDIAN HEALTH SERVICE BY COUNTY OF RESIDENCE, ARIZONA, 1990

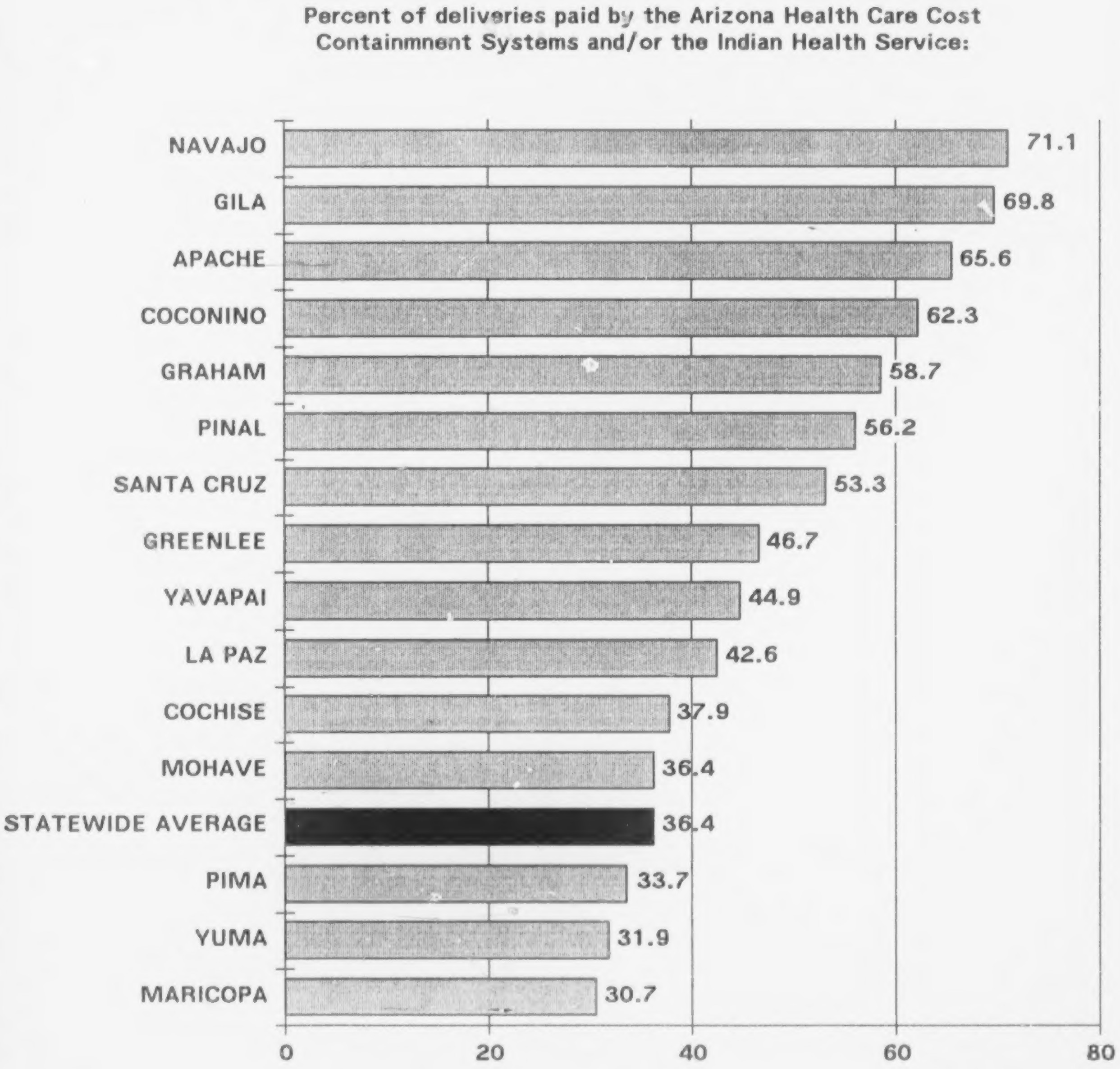
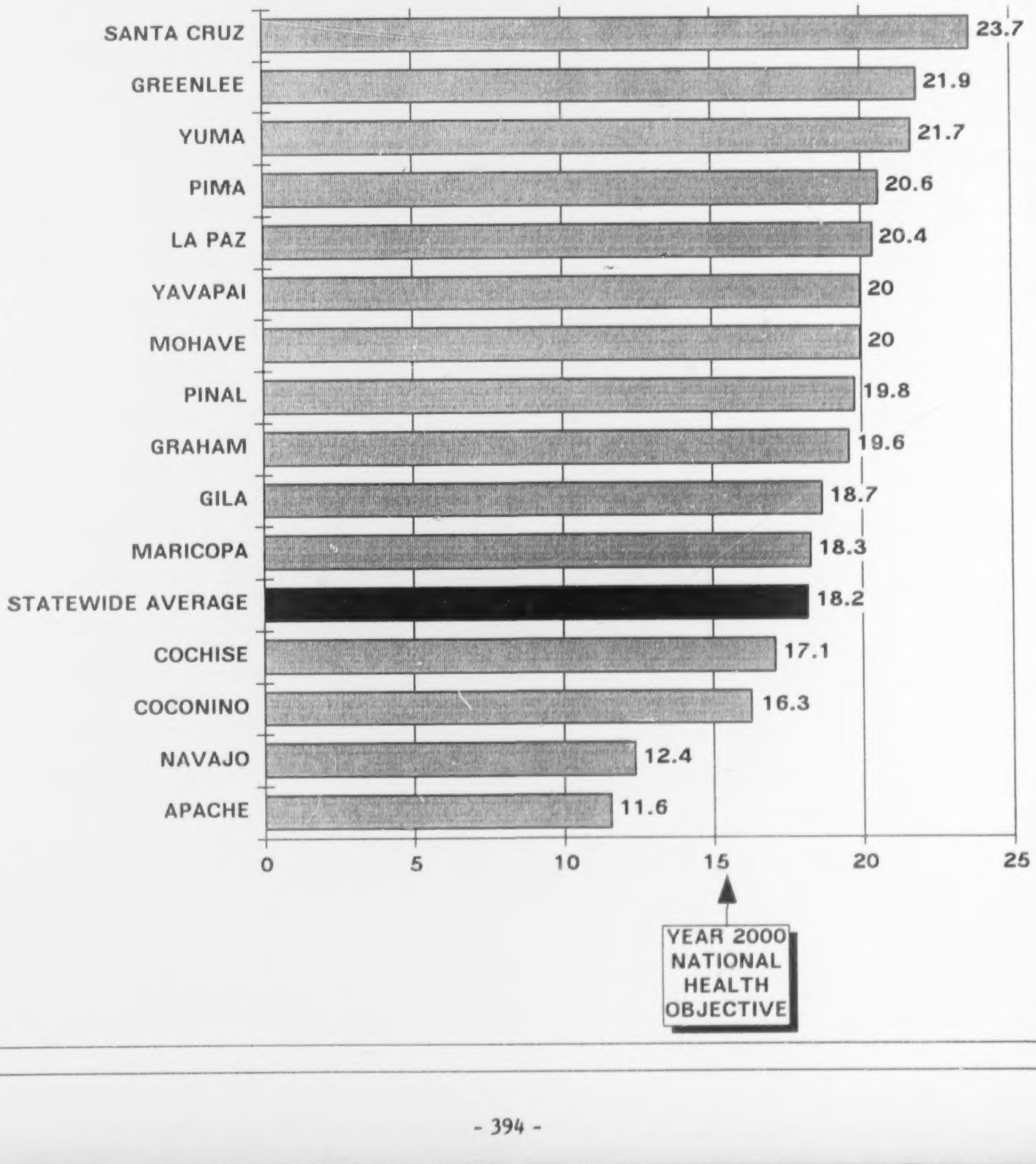


FIGURE 90.



CESAREAN DELIVERY RATES
BY COUNTY OF RESIDENCE, ARIZONA, 1990

Number of cesarean sections per 100 deliveries:

FIGURE 91.

PERCENT WOMEN GIVING BIRTH WITH NO PRENATAL CARE DURING THE FIRST TRIMESTER, BY COUNTY OF RESIDENCE, ARIZONA, 1990

Number of women giving birth who received no prenatal care in the first trimester or no care at all, per 100 deliveries:

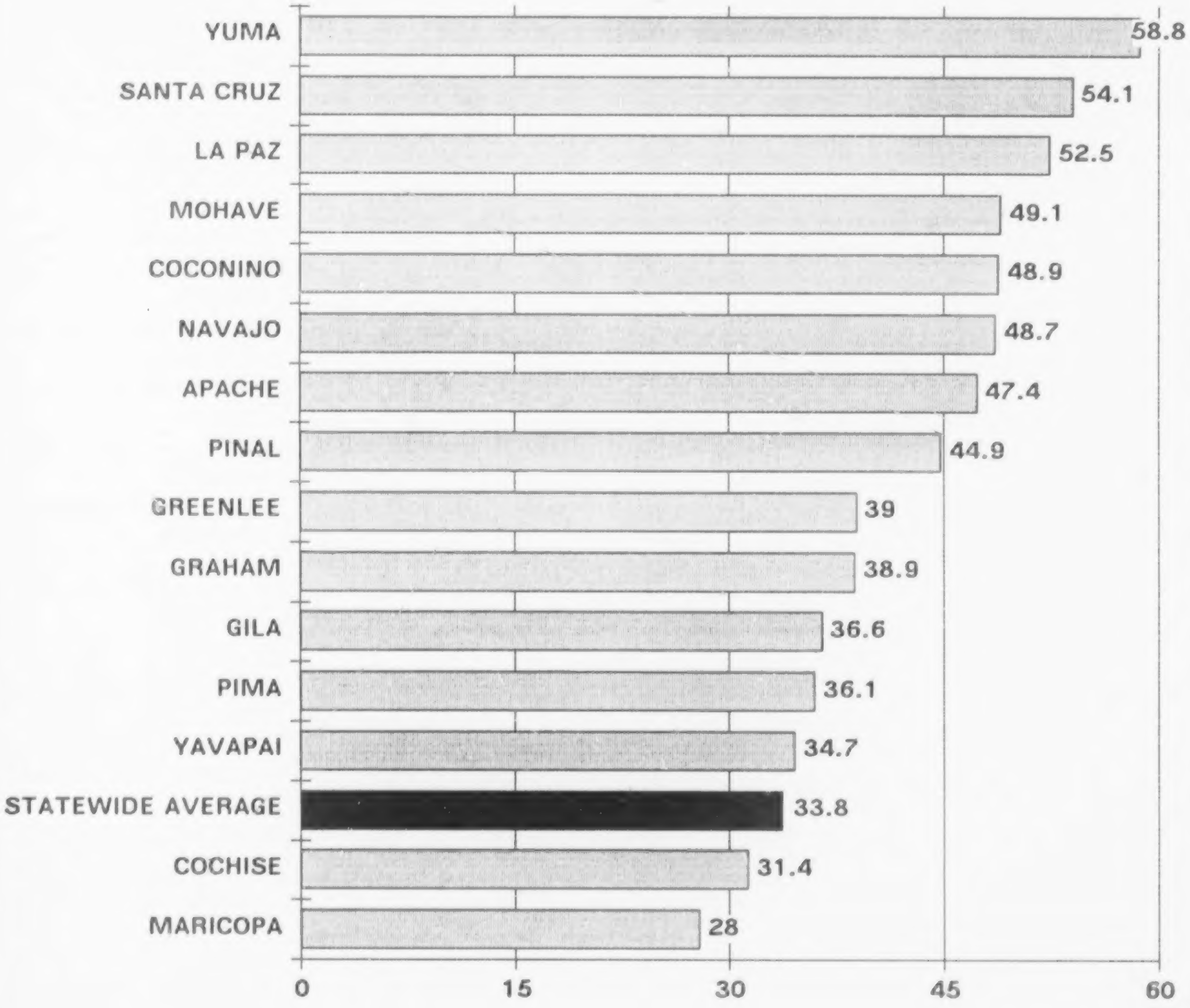
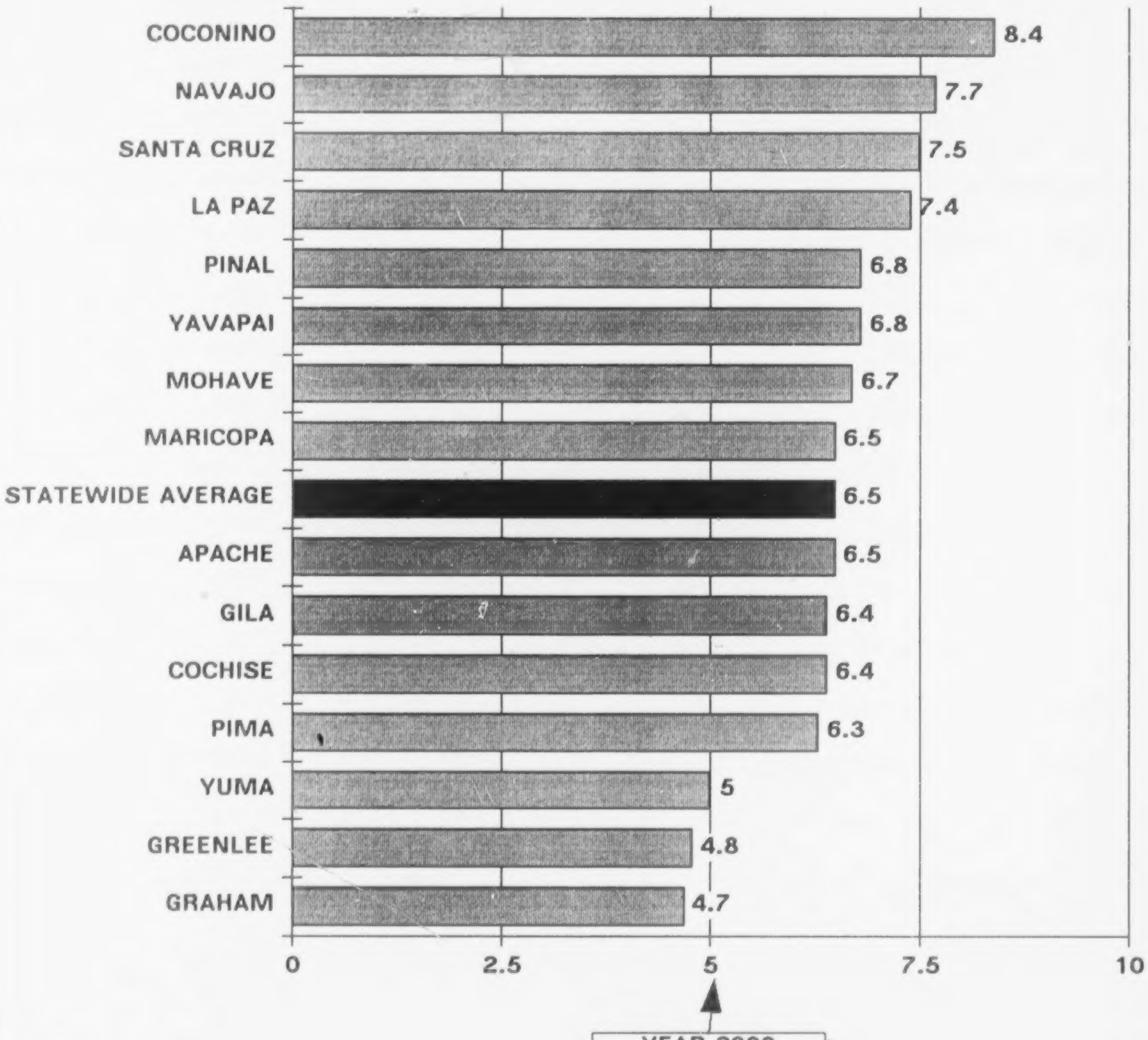


FIGURE 92.

RISK OF LOW-BIRTHWEIGHT BIRTHS BY COUNTY OF RESIDENCE, ARIZONA, 1990

Number of neonates weighing less than 2,500 grams
(or 5.5 lbs) at birth per 100 births:



YEAR 2000
NATIONAL HEALTH
OBJECTIVE
5.0/100

FIGURE 93.

RISK OF PREMATURE BIRTHS BY COUNTY OF RESIDENCE, ARIZONA, 1990

Number of births occurring through the end of the last day of the 37th week (259th day) of pregnancy per 100 births:

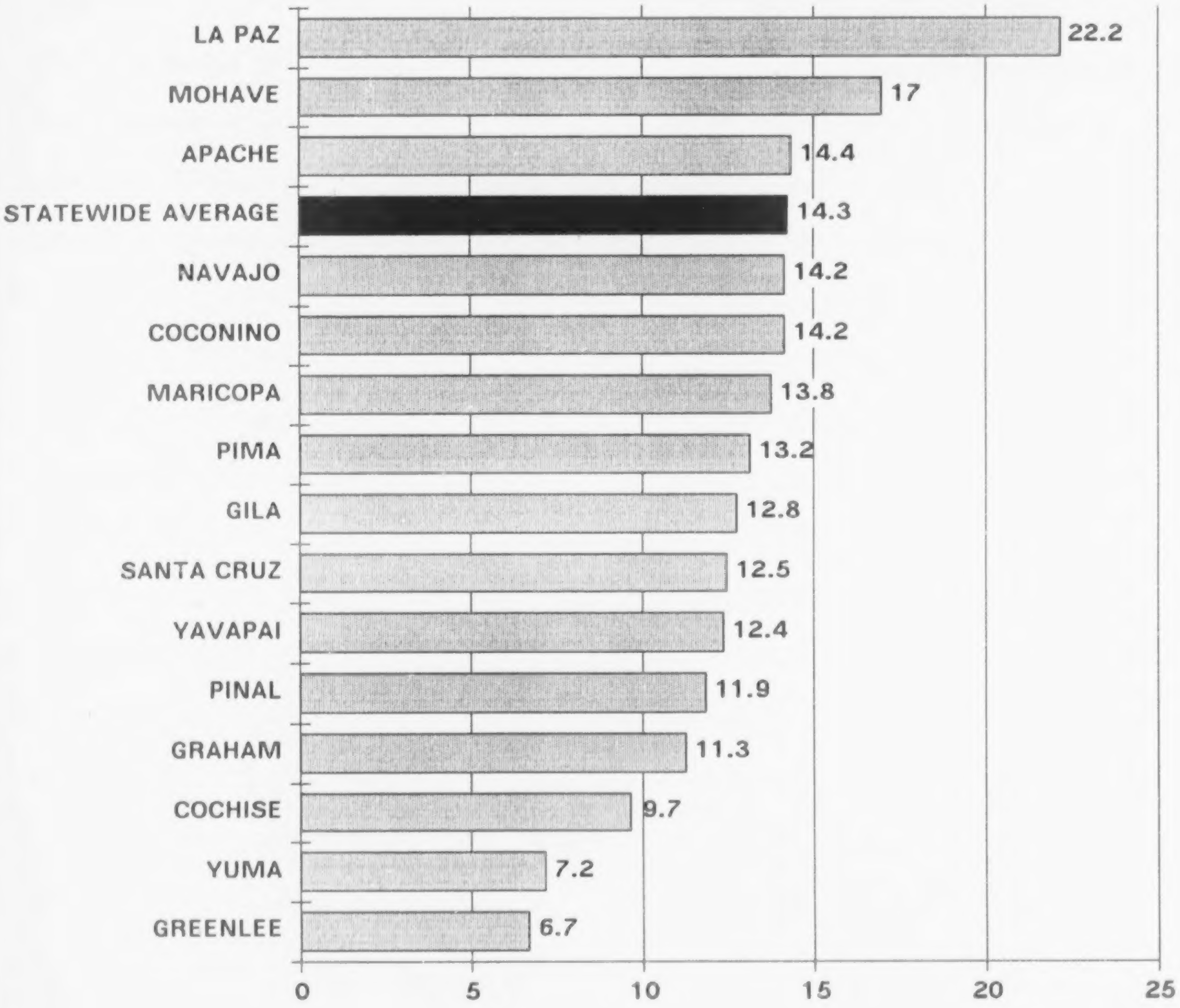


FIGURE 94.

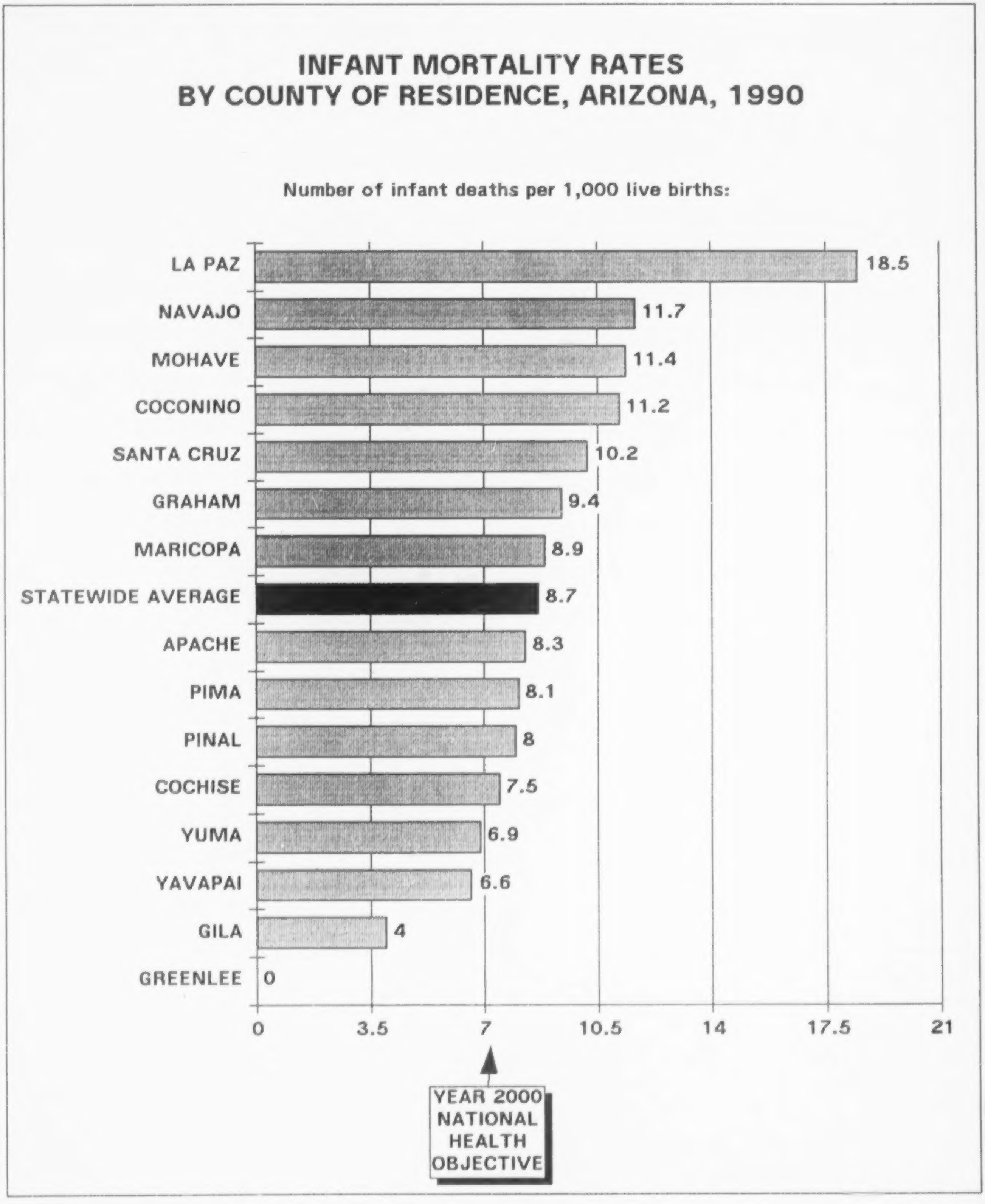
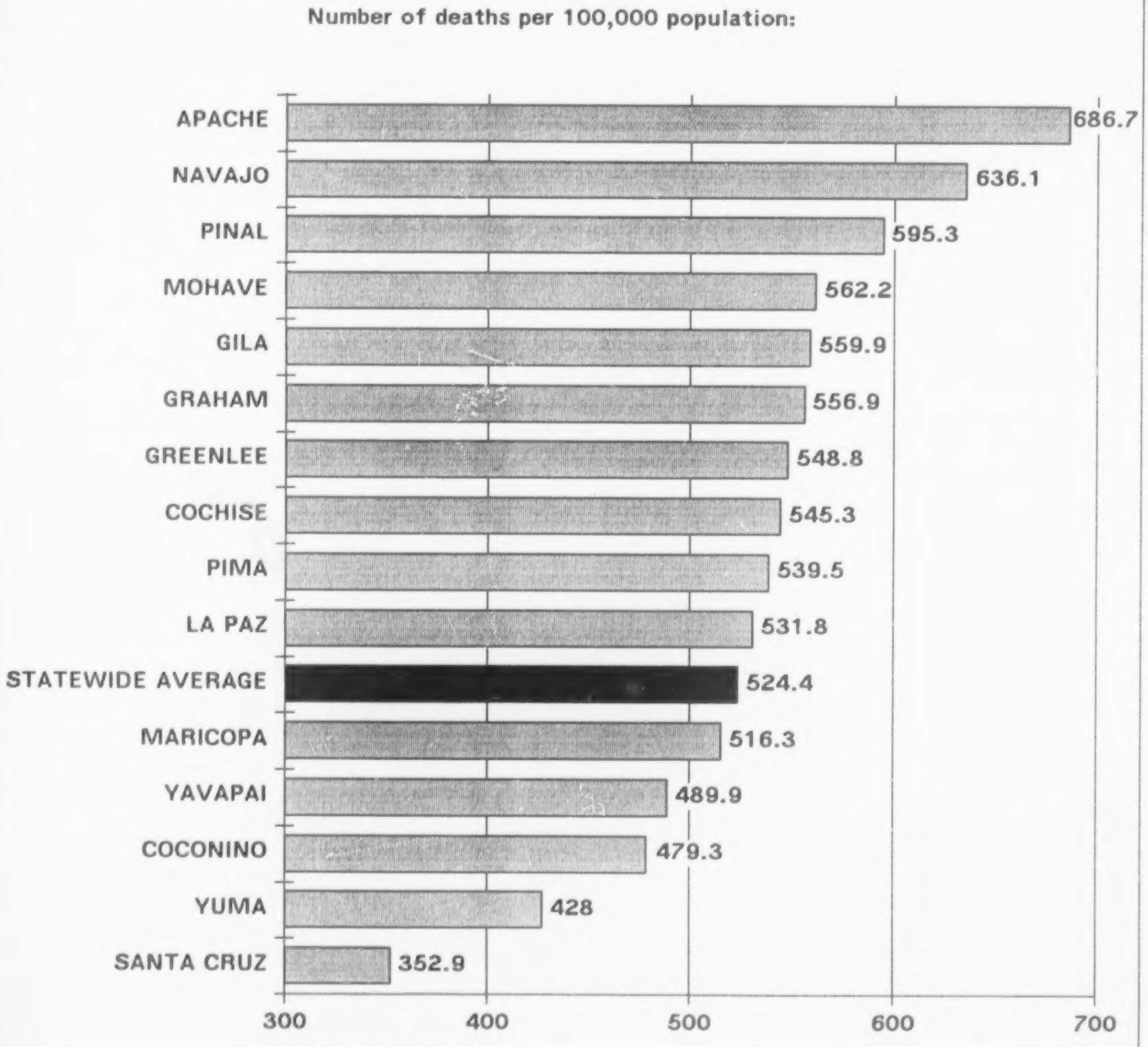

INFANT MORTALITY RATES
BY COUNTY OF RESIDENCE, ARIZONA, 1990
Number of infant deaths per 1,000 live births:
LA PAZ 18.5
NAVAJO 11.7
MOHAVE 11.4
COCONINO 11.2
SANTA CRUZ 10.2
GRAHAM 9.4
MARICOPA 8.9
STATEWIDE AVERAGE 8.7
APACHE 8.3
PIMA 8.1
PINAL 8
COCHISE 7.5
YUMA 6.9
YAVAPAI 6.6
GILA 4
GREENLEE 0
0
3.5
7
10.5
14
17.5
21
YEAR 2000 NATIONAL HEALTH OBJECTIVE

FIGURE 95.

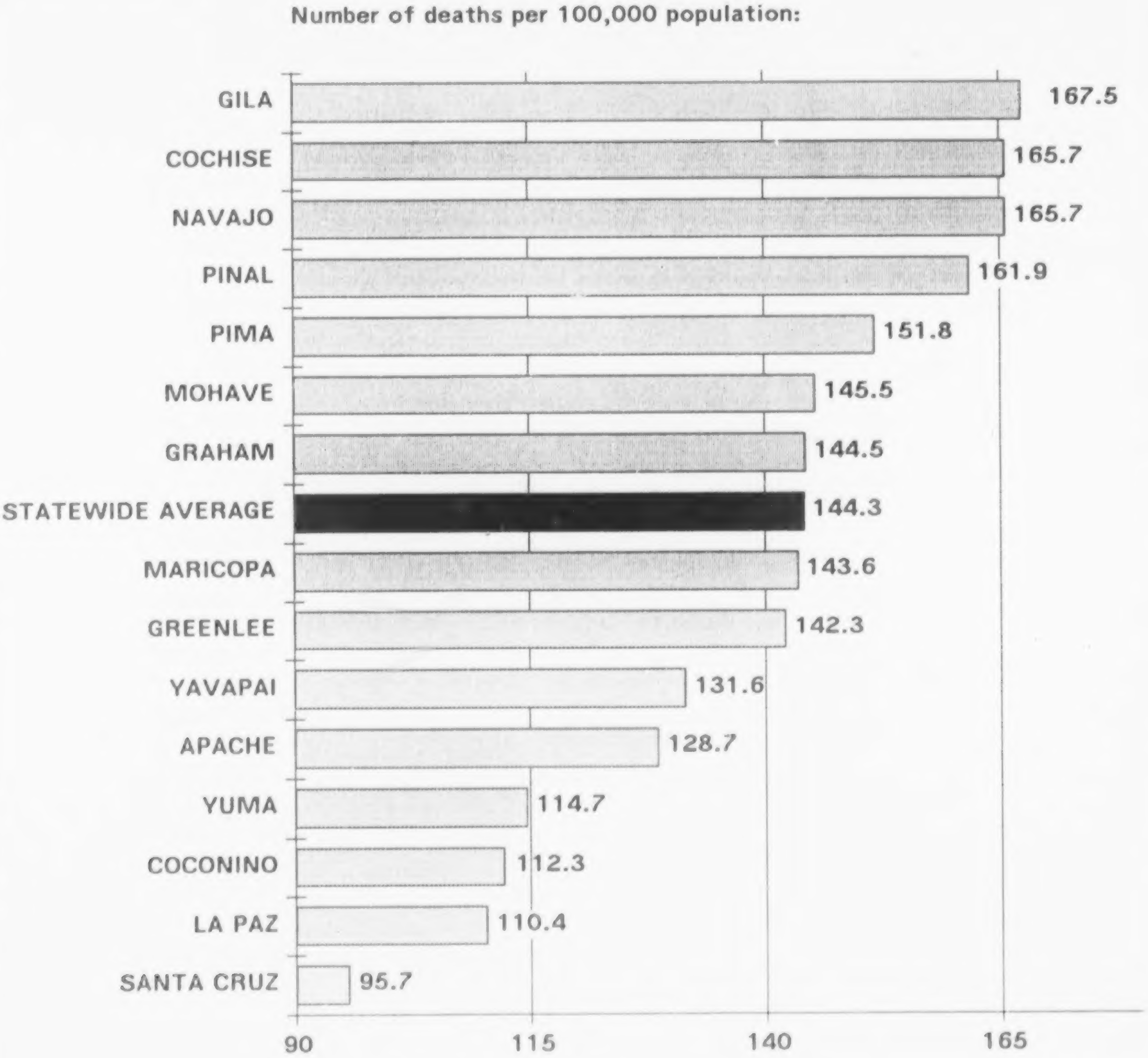
AGE-ADJUSTED*MORTALITY RATES FOR ALL CAUSES BY COUNTY OF RESIDENCE,ARIZONA, 1990



*Adjusted to U.S.population in 1940.

FIGURE 96.

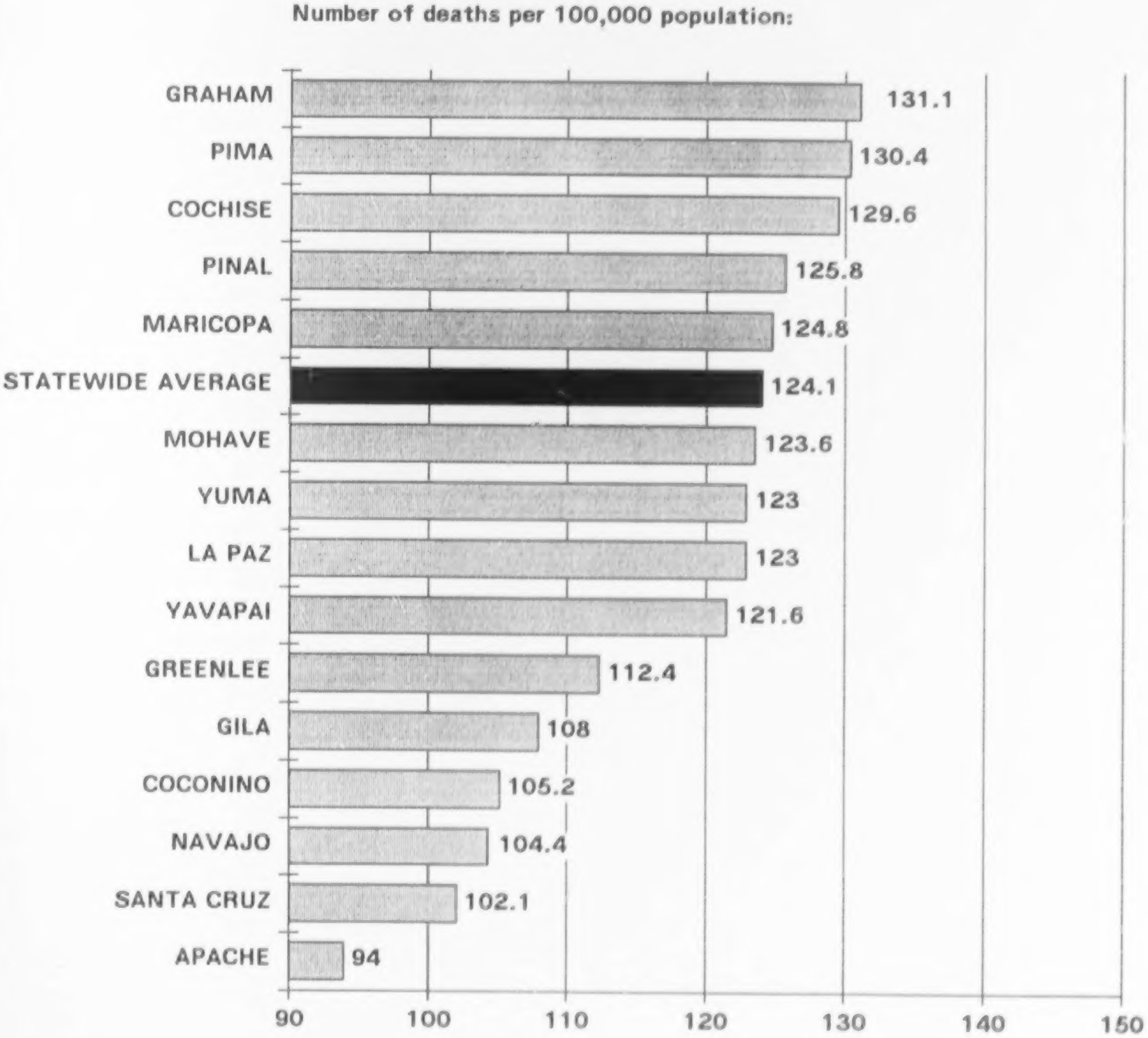
AGE-ADJUSTED*MORTALITY RATES FOR DISEASES OF HEART BY COUNTY OF RESIDENCE, ARIZONA, 1990



*Adjusted to U.S.population in 1940.

FIGURE 97.

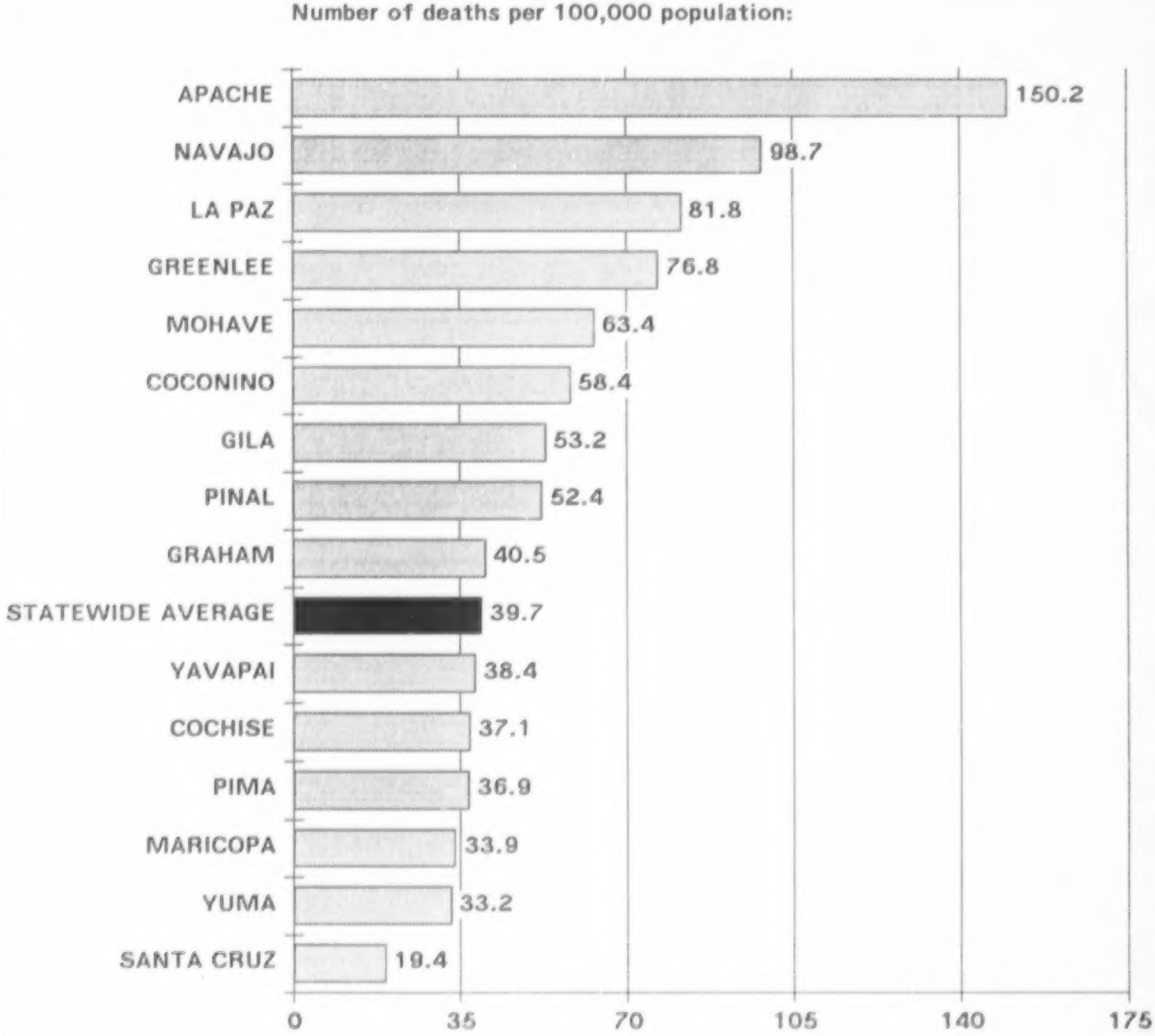
AGE-ADJUSTED*MORTALITY RATES FOR MALIGNANT NEOPLASMS BY COUNTY OF RESIDENCE, ARIZONA, 1990



*Adjusted to U.S.population in 1940.

FIGURE 98.

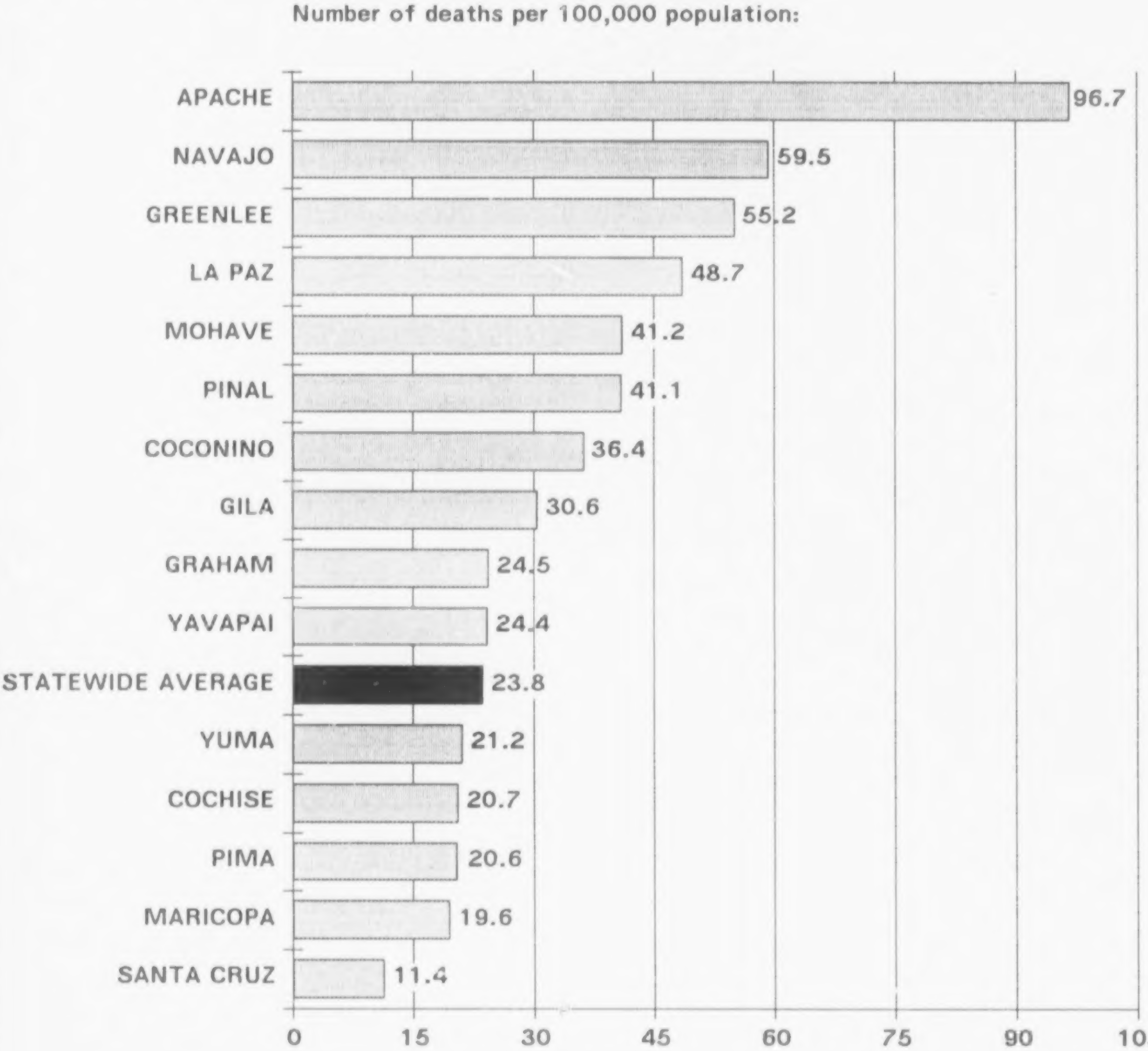
AGE-ADJUSTED*MORTALITY RATES FOR UNINTENTIONAL INJURIES BY COUNTY OF RESIDENCE, ARIZONA, 1990



*Adjusted to U.S.population in 1940.

FIGURE 99.

AGE-ADJUSTED*MORTALITY RATES FOR MOTOR VEHICLE-RELATED INJURIES BY COUNTY OF RESIDENCE, ARIZONA, 1990

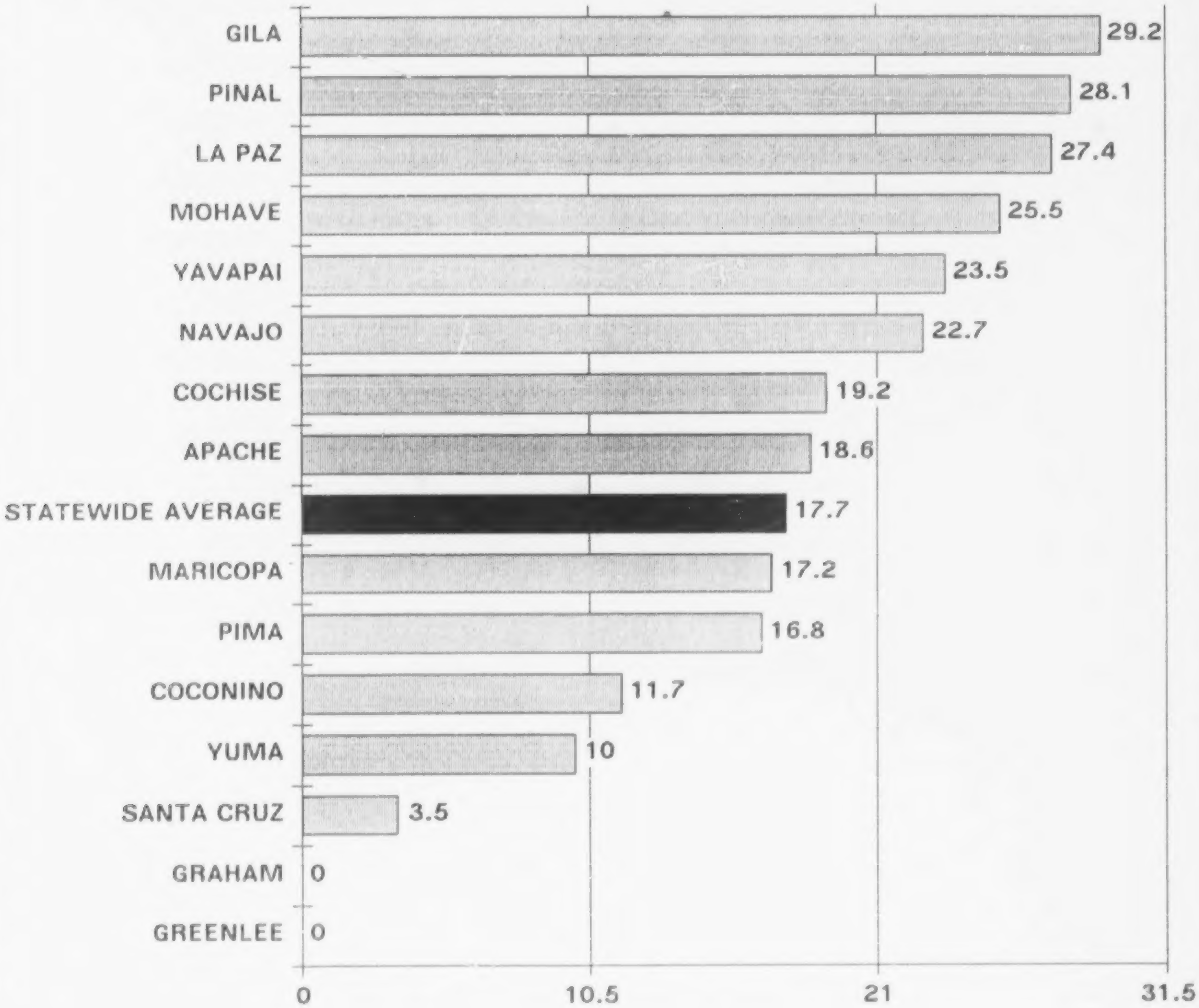


*Adjusted to U.S.population in 1940.

FIGURE 100.

AGE-ADJUSTED*SUICIDE MORTALITY RATES BY COUNTY OF RESIDENCE, ARIZONA, 1990

Number of suicide deaths per 100,000 population
in specified county:



*Adjusted to U.S. population in 1940.

Public health surveillance reports available from the Office of Planning and Health Status Monitoring:

ARIZONA HEALTH STATUS AND VITAL STATISTICS, 1990. Phoenix: Arizona Department of Health Services, 1992

ARIZONA HEALTH STATUS PROFILE, 1990. Phoenix: Arizona Department of Health Services, 1991.

CLOSING THE DECADE: ARIZONA HEALTH STATUS AND VITAL STATISTICS, 1980 - 1989. Phoenix: Arizona Department of Health Services, 1991.

****Teenage Pregnancy, Arizona, 1990.** Phoenix: Arizona Department of Health Services, 1992.

****Abortion Surveillance Report, Arizona, 1990.** Phoenix: Arizona Department of Health Services, 1992.

****Unintentional Drowning Deaths, Arizona, 1990.** Phoenix: Arizona Department of Health Services, 1992.

****Injury Mortality Among Children and Adolescents, Arizona, 1990.** Phoenix: Arizona Department of Health Services, 1992.

****Firearm-Related Fatalities, Arizona, 1990.** Phoenix: Arizona Department of Health Services, 1992.

****Drug-Related Mortality, Arizona, 1990.** Phoenix:Arizona Department of Health Services, 1992.

****Suicide Mortality, Arizona, 1990.** Phoenix:Arizona Department of Health Services, 1992.

*****-indicates that prior reports for 1980 - 1989 are also available.***